

Additional chart coverage may be found in CATP2, Catalog of Nautical Charts. $SECTOR~ \pmb{8} \longrightarrow CHART~INFORMATION$

SECTOR 8

THE BRITISH VIRGIN ISLANDS AND THE LEEWARD ISLANDS

Plan.—This sector describes the British Virgin Islands, including the various island passages involved.

The remaining part of this sector will be devoted to the Leeward Islands, lying SE of the British Virgin Islands.

General Remarks

8.1 The British Virgin Islands, located N and E of the Virgin Islands of the United States, are comprised of Tortola, Virgin Gorda, Anegada, Jost Van Dyke, Peter Island, and about 35 smaller islands and cays.

Road Harbour, Sopers Hole and Gorda Sound are the three main harbors within the British Virgin Islands.

There are no berthing accommodations for large ships in the group, except for Port Purcell in Road Harbour with 7.3m alongside. Other large ships must anchor in the roadsteads.

The demarcation line between the Virgin Islands of the United States and the British Virgin Islands runs N between Little Hans Lollik and Little Tobago, then through The Narrows between Saint John and Great Thatch Island, then around the E side of Saint John through Flanagan Passage between Flanagan Island and Pelican Inlet.

On approaching the British Virgin Islands from the N, Virgin Gorda will be the easiest feature to identify, rising in a clear, well-defined peak.

West of Virgin Gorda, Tortola will appear the next most conspicuous as its highest peak will be seen, as a flattened and elongated summit.

Jost Van Dyke can be identified by a number of rugged pointed peaks.

Winds—Weather.—The weather of the Virgin Islands is ideal and is cooled 10 months of the year by the E trade winds. The islands have an average mean temperature of 26°C.

Fog, thunderstorms, and high humidity are almost unknown. Rainfall is moderate.

At Saint Martin E fronts cause rain at irregular intervals, mostly during summer. Hurricanes are a constant threat during June through November.

At Saint Christopher the average winds are from the E at a rate of 10 knots during the month of July, and 6 knots during the rest of the year.

At Antigua, the E to NE trades prevail with average speeds of 9 to 13 knots. The rainy season for the island is May through November.

The weather for Guadaloupe is generally healthful and tempered by trade winds. The island is subject to violent storms at times and hurricanes occur occasionally.

Rollers or ground swell in the area of the islands, frequently occur from October to May and sometimes continue for 3 or 4 days.

In general, they set in after a prevalence of E and SE winds. They also follow winds from the NE, especially when these winds are strong.

Rollers have been observed to break over depths of 16.5m between Tortola and Guana Island, close N.

The rollers appear to loosen sand, thus discoloring the water N of the islands as far as the edge of Virgin Bank.

In some places near the W end of Anegada, where the bottom is composed of fine sand, the formation of the banks is frequently changed.

Tides—Currents.—The average rise and fall of the tide is about 0.3m among the Virgin Islands. The actual fluctuation of the water level consequently depends largely upon the winds and other meteorological conditions. The tide of the Atlantic Ocean side is chiefly semi-diurnal, whereas on the Caribbean side the tide is chiefly diurnal.

The currents among the islands are not well established by observations. An ocean current, which has an average rate of 0.2 knot and a direction varying from NW to N, prevails during all seasons of the year.

The SE tidal current is reported to predominate during the summer months from the middle of June to the middle of August. Near the commencement of this period the current has been observed to set for 8 days continually to the SE with unusual force.

The NW tidal current is reported to prevail during the months of September, November, March, and April.

Depths—Limitations.—Numerous reports and surveys indicate that shoal patches of small extent may be encountered on the banks covered by this sector. Deep-draft vessels, especially those drawing over 12m should remain outside the 100m curve where possible.

The Virgin Islands are located on a bank, over which the depths are less than 200m, extending in an ENE direction for nearly 90 miles from the E end of Puerto Rico. Anegada is located close to its NE extremity, but the remainder of the group lie near the S edge of the bank.

Caution.—Vessels approaching the islands from the N should avoid the following banks:

- 1. **Whale Banks** (18°41'N., 64°43'W.), with a least depth of 18.5m.
- 2. **Turtle Head** (18°38'N., 64°46'W.), with a least depth of 11m.
- 3. **Barracouta Banks** (18°34'N., 64°52'W.), with a least depth of 20m.
- 4. **Kingfish Banks** (18°31'N., 64°40'W.), with a least depth of 14.5m.

Saba Bank, Barracuda Bank and the dangers extending E from St. Croix are the main dangers when approaching from S. Other dangers off-lying the Leeward Islands will be described later in the text.

Anegada

8.2 Anegada (18°44'N., 64°20'W.), on the W side of Anegada Passage (Sombrero Passage), is the N and E of the British Virgin Islands. It is about 9.1m high for the most part,

and except for a few places which have been cleared for cultivation, is covered with brushwood. The principal settlement is on the S side of the island.

The island is completely surrounded by reefs. The N side is fringed by a narrow barrier reef and is clear of off-lying dangers. The S side is foul up to 3.5 miles offshore, and has numerous coral heads fronting the shore. The depths off the N and E sides of the island within Virgin Bank decrease so rapidly that soundings are of little use.

Horse Shoe Reef (18°37'N., 64°13'W.), a dangerous reef upon which the sea breaks even in the finest weather, extends SE from East Point, the SE extremity of Anegada. It then recurves for 4.5 miles SW terminating in Herman Reefs. The sea only breaks on Herman Reefs with a swell or strong breeze.

The White Horse is a heap of white dead coral, about 0.9m high, lying about 2 miles WSW of the SE extremity of Horse Shoe reef, and two similar heaps, up to 0.6m high, lie within 0.3 mile S of it. They are not visible from any distance and periodically disappear below the surface.

Two stranded wrecks lay on the E edge of the coral heads on Horse Shoe reef, 1.7 miles ENE and 4.7 miles NNW, respectively, of the White Horse.

Hawkes Bill Bank, with a least depth of 4.9m, Robert Reef, with a depth of 8.9m, and Fox Rock, with a depth of 8.2m lie respectively 4 miles WNW, 4 miles W, and 5 miles W of Herman Reefs.

Anchorage.—Vessels can anchor in 11.9m with West End, the W extremity of Anegada, bearing 338° and East Point bearing 072°. Another good anchorage is found with West End bearing 328° and East Point bearing 050°.

A vessel anchored with West End bearing 036° distant 1.7 miles in 10m, good holding ground.

There is good anchorage for small craft, 2 miles ESE of West End in a depth of 2.4m, which is approached through a shallow buoyed channel in the reef.

Good temporary anchorage can be taken in 9.1 to 11m about 1 mile W of West End, but only when there are no rollers.

Caution.—Anegada being low with no prominent landmarks, the strength and irregularity of the tidal currents in its vicinity make the approach to it, at night, extremely dangerous, unless very certain of the ship's position.

By day, however, the risk is not so great in clear weather, as Virgin Peak on Virgin Gorda is an excellent landmark.

Vessels approaching the anchorages should use caution in rounding West End and the shoal ground extending S and SW of it. Vessels should take soundings continuously and should not approach these anchorages in depths of less than 9.1m.

Three submarine cables lie W of the W end of Anegada Island as shown on the chart.

Tobago Islands

8.3 The **Tobago Islands** (18°27'W., 64°50'W.), consisting of Great Tobago Island and Little Tobago Island, 1 mile SW, are the westernmost of the British Virgin Islands. It has been reported Little Tobago Island is a good radar target for a distance of up to 18 miles.

The S side of Great Tobago Island is fringed with coral to a short distance offshore, but elsewhere its coasts are steep-to, close to the cliffs. Some rocks lie close off the NW extremity of the island.

Watson Rock, 27m high, lies off the SW extremity of the island. King Rock, about 0.7 mile S of the SW extremity of Great Tobago Island, is steep-to and awash.

A submarine cable runs in an E to W direction about 1.2 N of Tobago Island and Jost Van Dyke Island.

Mercurius Rock (18°27'N., 64°49'W.), the only danger in the channel between Great Tobago Island and Jost Van Dyke Island, is small and steep-to, with a depth of 2.1m.

The rock lies about 0.7 mile ESE of the N extremity of Great Tobago Island. When using the passage between Great Tobago Island and Jost Van Dyke Island, a vessel should favor the E side of the channel.

Jost Van Dyke Island

8.4 Jost Van Dyke Island (18°27'N., 64°45'W.), the W extremity of which lies about 2 miles E of the SE extremity of Great Tobago Island, is lofty, rugged, bold, and steep-to.

The S side of the island is indented by three small bays, two of which are suitable for small craft with local knowledge.

Little Harbour, the E bay, is narrow and provides good shelter. Great Harbour, the middle bay has depths of 7.3m, 0.2 mile from its head. White Harbour, the W bay, is encumbered with reefs and shoals.

The charted anchorage S of White Bay is suitable for small vessels.

Little Jost Van Dyke (18°27'N., 64°43'W.) is connected to the NE end of Jost Van Dyke by a shallow ledge. Green Cay lies close E of Little Jost Van Dyke. Sandy Cay lies about 1 mile S of Green Cay.

The passage between Sandy Cay and Jost Van Dyke Island is 0.3 mile wide. Vessels should favor the W side of this passage which is steep-to, using caution to avoid the dangers off the SE side of Jost Van Dyke Island and Green Cay.

Tortola Island

8.5 Tortola Island (18°26'N., 64°37'W.), the largest of the British Virgin Islands, is flanked on its E and W ends by smaller islands which dot the sea enclosing an expanse of water considered to be one of the finest cruising grounds in the world.

Mount Sage, about 3.5 miles from the W end, rises to an elevation of about 521m.

Another mountain, 459m high, stands about 1 mile farther NE and 2 miles W of Road Harbour. It is surmounted by a radio station with three conspicuous towers, attaining an elevation of 485m. Two of the towers are fitted with dish aerials and one exhibits a red obstruction light.

Road Harbour, the only port of entry in the British Virgin Islands, is situated on the S coast of Tortola Island.

Great Thatch Island (18°23'N., 64°44'W.) lies about 0.5 mile W of the West end, the W extremity of Tortola Island.

The Narrows, between Saint John and Great Thatch Island, gives access to the channel between Tortola Island and Saint John, leading to Sir Francis Drake Channel and Flanagan Passage.

Tides—Currents.—Currents in the Narrows and the passage are tidal, and attain rates of 2 to 4 knots. Thatch Island Cut should not be attempted by sailing vessels from the N, except with a S current, as eddies and currents are strong. The tidal currents are very strong and eddies are formed.

Sopers Hole (18°23'N., 64°43'W.), limited port of entry, is a basin lying between the W extremity of Tortola Island on the N, and Little Thatch Island and Frenchman Cay on the S. Sopers Hole affords good sheltered anchorage for small vessels.

Depths of 23m, sandy bottom, are found in the middle of the basin N of Little Thatch Island, gradually decreasing to 11m about 91m from the shore on either side and to a lesser depth in the approach to the shoal area N of Frenchman Cay. Well up in the bight, the bottom is muddy, and provides better holding ground than in the middle.

There is a ferry landing pier and a yacht marina at Sopers Hole. A light is exhibited at the SW end of the landing pier.

8.6 Road Harbour (18°25'N., 64°37'W.) (World Port Index No. 11350), on the S coast of Tortola, lies in a bay which forms the natural harbor of the island. The bay is protected by ranges of hills from all except S and SE winds.

Roadtown, the capital of the British Virgin Islands, stands on the W shore of the bay.

The main berthing areas are Port Purcell, on the NE head of the harbor; Cruise Ship Jetty, at Wickham's Cay, W side of the harbor; and the Roadtown jetties, on the W side of the bay.

Aspect.—Todman Peak, 352m in elevation, is prominent standing NW of the harbor, and Mount Bellevue, 385m in elevation is also prominent standing NE of the harbor.

On the E side of the bay, there are several conspicuous silver colored oil tanks on Shirley Point, 0.7 mile NW of Hogs Valley Point; at night, lights burn in their vicinity. North of the tanks a conspicuous radio mast, painted red and white, attains an elevation of 92m with a shorter mast standing on a building close W.

On the W side of the bay four apartment blocks, appearing from E as three conspicuous buildings with flat roofs, stand about 0.5 mile SW of Burt Point in the vicinity of Slaney Point. Government House is white, with conspicuous arches. The Government Administration Building, a large stone-colored building with large tinted windows, stands about 0.5 mile NNE of Government House.

Little Wickham Cay, a small mangrove island lying in the NW corner of the bay, in a basin formed by two reclaimed areas and the coast, is prominent. The entrance to the inlet is protected by breakwaters beyond which two marinas are prominent.

Depths—Limitations.—The depths in the approach to Road Harbour are very irregular. Within 1.5 miles of Hogs Valley Point and 2 miles of Slaney Point there are many patches of rock and coral with depths of 3.7 to 7m.

Denmark Banks, with a least depth of 3.7m, lie about 0.6 mile E of Slaney Point. Lark Bank, marked by a lighted buoy, with a depth of 4.4m lies 0.3 mile N of Denmark Banks.

Scotch Bank, marked by a lighted buoy at its NW edge, has a least depth of 2.4m and lies on the E side of the entrance, WNW of Hogs Valley Point. The depths decrease rapidly towards the shore which is fringed by rock and coral.

Port Purcell Wharf, which is 244m long and has a depth alongside of 7.3m, can accommodate vessels with a maximum draft of 6.4m. Cruise Ship Jetty, which is 165m long, has a lighted dolphin lying 80m beyond its seaward end. It has been reported that vessels with a maximum draft of 9m can be accommodated. Vessels with drafts of less than 2m can use the Roadtown jetties.

Pilotage.—Pilotage is compulsory for vessels over 200 grt. The pilot embarks between Hogs Valley Point and Denmark

Banks. If requested, pilots will also board in Sir Francis Drake Channel.

Westbound vessels are boarded 2 miles S of **Buck Island** (18°26'N., 64°33'W.), while eastbound vessels meet 2 miles S of Hogs Valley Point.

The vessel's ETA should be sent 72, 48, and 24 hours in advance, with confirmation 1 hour before ETA.

There are no licensed pilots, but experienced mariners act as such. There is a port radio station, privately owned.

The port monitors VHF channel 16 with a working frequency of VHF channel 14. Communication with the pilots is on VHF channel 16, call sign "Tortola Pilot."

Anchorage.—Large vessels can anchor in position 18°25'40"N, 64°32'15"W in the bay S of Beef Island.

The above anchorage is exposed to winds from S and SE and sudden and heavy rain squalls sweeping into the bay may cause a vessel to drag anchor.

Road Harbour has a number of yacht marinas which can best be seen on the area chart. There is a small craft jetty adjacent to the town with depths of 0.6 to 3m alongside.

With the exception of ships supplying oil, ships awaiting embarkation of a pilot and ships anchored while under pilotage, anchorage is prohibited in an area best seen on the chart.

Oil and gas submarine pipelines extend into the harbor from the E side of the bay, to terminal berths consisting of mooring buoys. The positions are best seen on the chart.

Directions.—From a position about 0.5 mile S of **The Bluff** (18°26'N., 61°31'W.), a vessel should steer to pass similar distance SE of Nora Hazel Point (3.2 miles WSW) keeping clear of depths of 8.5m about 1 mile W and about 0.5 mile S of the point.

Then, the yellow dome of Fort Burt hotel in line with the 290m summit of the hill behind it, bearing 278°, will lead close aboard the 10m contour off Hogs Valley Point.

The dome is not easy to distinguish unless the sun is high.

When 0.5 mile off Burt Point course should be altered to NW to pass between Scotch Bank and Lark Bank with either the extremity of the breakwater extending SW from Wickham's Cay 2 or the Cruise Ship Jetty dolphin bearing 318°.

When the conspicuous 92m radio mast on the E side of the harbor bears about 040° course may be altered N towards Port Purcell. The right hand edge of a long low turquoise-colored building on the quay, bearing 003°, will lead in a least depth of 6.8m to the quay.

Caution.—It is reported that the positions of the buoys in Road Harbour are unreliable owing to the poor holding ground and occasional strong winds and currents.

It is usual for vessels to berth heading SE turning on the starboard anchor. Tugs are not available and, after sunrise, the prevailing E winds may make berthing difficult. The pilot boat will assist with berthing lines.

8.7 Guana Island (18°29'N., 64°34'W.) lies close off the NE side of Tortola Island. A fairway passage between the two islands has a least depth of 8.8m. Good sheltered anchorage can be found in 12.9m in the entrance of White Bay, with the W extremity of the island bearing 347° and Monkey Point, the S extremity of the island bearing 112°.

This anchorage should not be used during the period of the rollers.

Great Camanoe (18°28'N., 64°32'W.) lies about 1 mile E of Guana Island. The island consists of two parts connected by a low, narrow neck of land. Scrub Island, lies close E of Great Camanoe Island, from which it is separated by a narrow channel, in which there are many shoals and rocks.

Little Camanoe Island and Marina Cay are W and E, respectively, of the S end of Great Camanoe Island.

Submarine cables exist near the S side of Great Camanoe Island and can best be seen on the area chart.

Beef Island (18°26'N., 64°32'W.) lies about 0.5 mile S of Great Camaneo Island and is separated from the E side of Tortola Island by a narrow and shoal passage. The S extremity of the island, marked by a light, is a prominent landmark. Beef Island and Tortola Island are connected by a bascule bridge.

Good anchorage can be taken in 24m in the lee of Beef Island, about 0.7 mile W of its S extremity. Buck Island lies about 2 miles W of the S extremity of Beef Island.

Virgin Gorda

8.8 Virgin Gorda (18°29'N., 64°24'W.) is located with its SW extremity about 4 miles SE of the E extremity of Scrub Island. The island is easily identified by its rising in its central part to a distinct summit in Virgin Peak, also known as Virgin Gorda Peak, 414m high.

The part of the island consists of a narrow tongue of land composed of irregular rugged hills terminating at Pajaros Point, in a remarkable pinnacle rock. The SW part of the island is a peninsula, which is connected with the central part by a narrow isthmus.

The most remarkable feature of Virgin Gorda is the field of granite boulders between its SW extremity and Colison Point, about 2 miles to the N.

The W side of the peninsula has been broken up by some violent action of nature into immense blocks of granite, that lie scattered about the coast.

St. Thomas Bay lies close S of **Colison Point** (18°25.8'N., 64°26.7'W.). A small government jetty is situated at the S end of St. Thomas Bay.

The approach to government jetty lies through an unmarked gap in the reef with a depth of 3m located about 0.2 mile N of the jetty. There are depths from 1.7 to 2.4m alongside the jetty which can also be approached from inside the reef.

Little Dix jetty is situated 0.5 mile SE of Colison Point.

Virgin Gorda Yacht harbor, a natural lagoon, lies 0.7 mile SSE of Colison point and can accommodate 110 yachts, up to 30m in length, in depths from 2.5 to 5m.

The harbor entrance is protected by a breakwater and is approached from NW towards Little Dix jetty and then by a

buoyed channel, with a depth of 3m, leading inside a reef lying parallel to the coast, close offshore.

No attempt should be made to cross the reef opposite the harbor entrance. The Harbor Master can be contacted on VHF.

The cays and islets lying up to 2 miles SSW of Virgin Gorda as far as Round Rock are composed of granite stone. Fallen Jerusalem, the largest of these islets, resembles a town in ruins. Uncharted below-water rocks were reported to exist between Round Rock and Fallen Jerusalem.

Three submarine cables, best seen on the chart, exist between Virgin Gorda, Great Camanoe, Little Camanoe, and Tortola.

A group of sparsely wooded islands, cays, and reefs front the N side of Virgin Gorda at a distance of 2 miles. Virgin Sound, Gorda Sound and Eustatia Sound lie within these islands and dangers.

8.9 Necker Island (18°32'N., 64°22'W.) is the northernmost island off the coast of Virgin Gorda. Foul ground with depths of less than 5.5m, extends about 0.5 mile W and about 0.3 mile SE. A continuous bank of coral heads has grown between 0.1 and 0.2 mile off the SW coast.

The Invisibles, lying about 0.7 mile E of Necker Island, are three rocky heads over which there are depths of from 1.2 to 1.5m, and the sea breaks over at times.

These rocks are not easily seen and caution should be used when in their vicinity.

Mosquito Island (18°31'N., 64°24'W.) lies about 2 miles SW of Necker Island and is separated from Virgin Gorda by a narrow and shoal passage.

Colquhuon Reef, which dries in some spots, extends about 0.5 mile SE of Mosquito Rock, which lies off the NE side of Mosquito Island.

Prickly Pear Island (18°30'N., 64°22'W.) lies about 1 mile E of Mosquito Island. It is the largest of the islands off the N side of Virgin Gorda.

Eustatia Island, close E of Prickly Pear Island, is enclosed by foul ground.

Virgin Sound, a channel 0.2 mile wide, extends between the reefs and shoals N of Prickly Pear Island and Eustatia Island and those S of Necker Island. The sound affords good temporary anchorage in depths from 12.8 to 18.3m, but care should be taken to avoid foul ground on either side.

Eustatia Sound is an area contained within the foul ground W of Eustatia Island, offering safe anchorage to small craft. Necker Island Passage, lies between Necker Island and Herman and Robert Reefs.

This passage should only be used during daylight hours. Less water than charted has been reported 3 miles E of Pajaros Point.

8.10 Gorda Sound (18°30'N., 64°22'W.) lies between Mosquito Island, Colquhoun Reef, Prickly Pear Island, and the N coast of Virgin Gorda. The sound is protected from all winds and sea rollers. Ships visiting Gorda Sound should obtain pratique at Road Harbour prior to entry.

Depths—Limitations.—General depths of 16.5 to 21.9m lie in the approach to the entrance, which lies between Colquhoun and Cactus Reefs. A channel with depths of 5.8 to 10.6m leads through the entrance, which is marked by buoys.

Within the entrance, the depths gradually increase to 18.3 to 21.9m in the large basin SW of Prickly Pear Island. Gorda Rock, about 0.5 mile SSW of the N end of Prickly Pear Island, has a depth of 9.1m and is the only danger in the fairway.

The channel between Gorda Sound and Eustatia Sound is shallow and foul, and in the middle of it is Saba Rock, 4.6m high. The W part of Gorda Sound between Mosquito Island and Anguilla Point is foul.

Anchorage.—Good sheltered anchorage can be taken in the middle part of the sound in depths of 20.1 to 21.9m.

British Virgin Islands—Sea Passages

8.11 A group of islands, separated from each other by deep passages, lie between Round Rock and Saint John Island.

Round Rock Passage (18°24'N., 64°28'W.), between Ginger Island and Round Rock, is clear of dangers and the best passage for entering Sir Francis Drake Channel from the E and S. This passage is easily identified from its position in relation to Fallen Jerusalem about 1 mile NE. A light is shown from the NE part of Ginger Island.

The passage has general fairway depths of 27m. The SE and NW tidal currents attain a velocity of 1 knot.

Cooper Island (18°23'N., 64°31'W.) lies about 1 mile SW of Ginger Island. Vessels may use the passage between the two islands but caution is necessary.

Above-water rocks lie within 0.2 mile of its NE side, and Carval, a rock, bold and steep-to, lies 0.7 mile ENE of the S extremity of the island.

Salt Island (18°22'N., 64°32'W.) lies about 0.5 mile SW of Cooper Island. The passage between the two islands is narrowed to a width of 0.1 mile. This passage should never be attempted by a sailing vessel. A light is shown at the NW extremity of Salt island. It is obscured intermittently between the bearings of 227° and 000°.

8.12 Salt Island Passage (18°22'N., 64°33'W.) lies between Salt Island and Dead Chest, 1.5 miles to the W.

Vessels using this passage, in which the sea is generally smooth, should keep within 0.5 mile of Salt Island to avoid Blonde Rock.

A narrow passage separates Dead Chest from the NE end of Peter Island, to the W.

A Marine Park, within limits as shown on the chart, has been established in the vicinity of the RMS Rhone wreck sites. Anchoring, fishing including lobstering, and the collection of live shellfish are prohibited within the park.

Norman Island (18°19'N., 64°37'W.) lies about 1.2 miles SW of the S extremity of Peter Island. The passage between the two islands is crooked, but navigable.

Vessels must keep clear of Carrot Shoal and Carrot Rock when transiting between Norman Island and Peter Island.

Pelican Island (18°20'N., 64°38'W.) lies about 0.5 mile NNW of the NW extremity of Norman Island. A bank, with a least depth of 11.9m, lies about 0.7 mile NNW of the island.

The Indians, four prominent jagged rocks lying close together, lie W of Pelican Island on the E side of Flanagan Passage. Flanagan Island lies about 1.2 miles WSW of The Indians.

Anchorage.—Great Harbour, a bight on the N side of Peter Island, entered W of Great Harbor Point.

A Marine Park, best seen on the chart, encumbers the entrance to Great Harbor. Anchoring, fishing including lobstering, and the taking of live shellfish are prohibited in the park.

Little Harbour, which indents the NW side of Peter Island is smaller and more exposed.

The Bight, a small inlet, lying between the projections that extend from the W side of Norman Island, affords excellent anchorage. Depths of up to 20m, good holding ground, lie up to 0.1 mile from the N and S shore and 0.2 mile from the head of the inlet.

Privateer Bay, lying close SW of The Bight, affords safe anchorage during the prevailing trade winds.

Sir Francis Drake Channel

8.13 Sir Francis Drake Channel (18°25'N., 64°30'W.) is bounded NW by Tortola Island and the islands off its E end, and SE by the W side of Virgin Gorda and the chain of islands which stretches between the SW extremity of that island, and the E extremity of Saint John. In the S part of the channel there are several coral patches, with depths of from 10.1 to 18.3m, the positions of which can best be seen on the chart.

The channel can be entered from the N through the passages on either side of Dog Islands, a group of small islands and islets lying off the NW part of Virgin Gorda, and from Flanagan Passage, which leads into the channel from the S. Vessels using the passage W of the Dog Islands must avoid Tow Rock, with a least depth of 3.9m, and lies about 1.2 miles WNW of West Dog Island.

Tides—Currents.—Tidal currents are weak and variable in Sir Francis Drake Channel but there is a NE current along the shores of Tortola Island. The channel has general depths of 20 to 49m except in the S part of the W portion of the channel where there are several coral patches with depths of 7.3 to 18.3m.

Anchorage.—There are two anchorages with good holding ground for deep draft vessels off the W side of Virgin Gorda clear of the submarine cables, best seen on the chart.

The N anchorage in 20.1 to 20.9m, lies in the bight between the NW extremity of Virgin Gorda and Colison Point. This anchorage is somewhat protected from the NW by the Dog Islands.

During the winter months it is advisable to anchor midway between Virgin Gorda and the Dog Islands, using a long scope of chain.

The S anchorage, in 23.8 to 25.6m, lies about 1 mile offshore between Colison Point and Fallen Jerusalem.

Leeward Islands

8.14 The Leeward Islands lie to the E and SE of the British Virgin Islands. Ships passing E or windward of the islands can pass fairly close. The major passages between the principal islands are deep in the middle and afford passage to deep draft ships. The islands being high, adequate radar echoes should ensure clearing the dangers adjacent to the islands.

Most of the harbors are small and large ships must anchor in the small roadsteads or on the narrow banks off the island towns. The port facilities on the islands are extremely limited for the most part.

The general ocean current circulation throughout these islands is to the W and generally the rates are less than one knot and influenced by the wind forces. Near the islands there is some tidal current influence.

Anegada Passage (Sombrero Passage)

8.15 Sombrero (18°36'N., 63°25'W.), an island with precipitous sides, lies on a small circular bank with general depths of 18.5 to 67.0m. The surface of the island is rough and rises in sharp jagged points. Vegetation is sparse, but there is abundant bird life on the island.

A light is exhibited near the center of the island.

The keeper's dwellings and a flagstaff stand close N of the light. The circular concrete base, about 6m in height, of a former light stands close E of the light.

A ruined chimney about 10m in height stands about 0.1 mile SW of the light.

Depths—Limitations.—A bank, with depths from 43 to 62m, lies with its center 10 miles SE of Sombrero, and another bank, with a least charted depth of 64m lies with its center 16 miles E of the island. There are no known dangers on either bank.

Anchorage.—Anchorage may be obtained off the W side of the island in depths of about 22m about 0.2 mile W of the light. Radio contact is maintained with Anguilla.

Anegada Passage (18°20'N., 63°40'W.), the channel between the British Virgin Islands and the Leeward Islands, is wide, deep and clear of dangers in the fairway but is not lighted in the S approach.

The least depth of 22m lies about 14 miles SSE of the E extremity of Virgin Gorda.

Anguilla

8.16 Anguilla (18°13'N., 63°03'W.) is the N of the Leeward Islands positioned 30 miles SE of Sombrero Island. Anguilla is low and flat in appearance. Road Bay, on the NW side of the island, is a port of entry. The island should only be approached in daylight; because of its low elevation it is hard to identify at night. A light is displayed from Snake Point at the NE tip of the island.

Depths less than charted have been reported in the area of the island, therefore, vessels with drafts greater than 12m are advised to keep outside the 100m curve where possible.

Dog Island (18°17'N., 63°15'W.) is covered with brushwood and grass, and lies about 8 miles NW of the SW extremity of Anguilla. Its SE side is steep-to except for Bay Rock, about 0.2 mile off the S side. Landing can be made abreast this rock.

A number of cays lie off the coast of Dog Island and can best be seen on the area chart. Dog Island Channel, lies between Dog Island and Prickly Pear Cays.

The fairway has a width of 2 miles with depths of 13.1 to 19.5m. Vessels should pass W of Dog Island unless the sea in

the channel is calm. Flirt Rocks, two in number, lie close together N of Prickly Pear Cays.

Prickly Pear Cays (18°15′N., 63°10′W.) are two islets separated by a narrow boat passage. Both islets are covered in brush, the W cay being longer and narrower than the E cay. A small rock, 2m high, called North Cay lies N of the E cay.

Seal Island Reefs (18°17'N., 63°06'W.) extend about 5.5 miles E from Flirt Rocks. The E end of the reefs form the NW side of Northern Channel which leads into Crocus Bay. The reefs are dangerous to approach at night from the N as the bottom does not shelve sufficiently to indicate its proximity, there being depths of 25 to 29m close to the edge of the reef and also within 4 miles to the N of the reef.

Seal Island (18°16'N., 63°09'W.) lies on the S side of Seal Island Reefs, 1.5 miles E of the reefs W extremity.

A small group of rocks lie 0.3 mile W of Seal Island. North Wager is a small dark rock lying about 0.7 mile SSW of the W end of Seal Island.

8.17 Scrub Island (18°17'N., 62°57'W.) lies off the NE end of Anguilla and is separated from it by a narrow passage with a depth of 11m in the fairway. The island is covered with brushwood and stunted trees.

The sea breaks heavily on steep-to rocks which extend 0.5 mile from the E end of Scrub Island. The island is a hillock of white rock, which is very distinct when the sun is shining on it. Landing is possible on the beach on the SW side of the island. A stranded wreck is located near Graften's Point at the E end of the island.

Little Scrub Islet is black and precipitous, and lies off the NW side of Scrub Island.

Middle Bank (18°15'N., 63°05'W.) a narrow ledge in Northern Channel, has a least depth of 6.6m. The bottom of the bank is distinctly visible and heavy seas frequently break on it in winter. Dowling Shoal, lies about 2.5 miles W of Crocus Bay. The shoal and Sandy Island at the NE end of the shoal are incorporated into a Marine Sanctuary as best seen on the chart. A patch of the shoal is awash on its NW edge.

Anguillita Island lies close off the SW end of Anguilla. A light is shown from the NW tip of the island.

The shores of **Crocus Bay** (18°13'N., 63°05'W.) are steep-to and heavily wooded. On the NE and S sides of the bay there are high white cliffs which stand out clearly.

At the head of the bay there is a sandy beach from which a broad road, clearly visible from the W, leads to the principal settlement of the island. In the settlement there is a conspicuous high tree which, with the road, enables Crocus Bay to be identified from seaward. A Marine Sanctuary, best seen on the chart, has been established in the N half of the bay.

Road Bay lies S of a heavily wooded peninsula 2 miles SW of Flat Cap Point. At the head of the bay is sandy beach, behind which is the small village of Sandy Ground.

There is a church, with a white roof and small darker spire, in South Hill village on the hill behind the S end of the bay.

Road Ground, with a depth of 4.8m, lies 0.3 mile off the S entrance point of Road Bay. Road Point Light is obscured over Road Ground. The light is difficult to identify in daylight due to the surrounding vegetation.

Apart from this shoal, depths of 5m or more can be carried into the bay until Road Point bears 013°, when depths shoal gradually towards the beach. The deepest water is at the S end of the bay. A stranded wreck is found in the SE part of the bay.

Road Bay is the main port of the island. Several trading schooners will usually be found at anchor up to 0.2 mile offshore. Ships entering the bay at night are cautioned that these schooners do not normally exhibit lights.

It has been reported that heavy, floating but partly submerged, unmarked objects, have been encountered in the vicinity of these schooners. It is advisable to navigate with caution in Road Bay with a good lookout in the bows.

Signals.—A red pennant is displayed when winds of 28 to 33 knots are expected. A red flag with a black center is displayed when winds between 34 to 63 knots are expected. Two red flags with black centers are displayed when a hurricane is expected and at night red flares are sent up.

Anchorage.—Good anchorage, undisturbed by rollers, can be obtained in depths from 15 to 25m, sand, anywhere between Prickly Pear Cays and Crocus Bay, S of the parallel of North Wager.

Good anchorage can be obtained in the approach to Road Bay, in a depth of 16.8m sand, good holding ground, about 0.5 mile W of Road Point. With a NE wind a moderate ground swell is sometimes experienced in this anchorage.

A vessel should approach from W with Flat Cap Point ahead, bearing 093°, which course leads one mile N of Dowling Shoal. When Road Point bears 157°, the vessel should steer 170°, anchoring when the church bears 118° and Flat Cap Point bears 047°.

Small vessels can obtain good anchorage in Road Bay according to draft. A vessel found comfortable anchorage, in a depth of 6m about 0.2 mile SW of Road Point.

Caution.—Rapid coral growth in the area N of Road and Crocus Bays was reported. New coral heads have been discovered within 0.2 mile of the S edge of Seal Island reef. Vessels are advised to navigate with extreme caution in the area.

8.18 Anguilla Channel (18°09'N., 63°05'W.) leads between Anguilla and Saint Martin with fairway depths of 18.2m and deeper. The channel is free of charted dangers, however, this is based on a mid nineteenth century vintage lead line survey and isolated shoal areas may exist in the passage.

The SE coast of Anguilla is fronted by a steep-to coral reef, which extends up to 0.2 mile offshore in places. Rendezvous Bay offers shelter to small vessels with local knowledge.

An oil terminal has been established in **Corito Bay** (18°10.4'N., 63°03.2'W.). Four oil tanks have been established on shore and a submarine pipeline extends 244m SSE from the shore.

The seaward end of the pipeline is marked by a floating pontoon and three mooring buoys are situated 122m farther S.

Saint Martin

8.19 Saint Martin (18°04'N., 63°04'W.) has divided sovereignty, the N part of the island known as Ile Saint Martin belongs to France, and the S part known as Sint Maarten, belongs to the Netherlands. The coasts of the island are much

indented by bays and creeks, some of which afford good anchorage. A high ridge extends S through the central part of the island.

Pointe Blanche (Witte Kaap) (18°00'N., 63°02'W.), the SE point of Sint Maarten, consists of prominent white cliffs.

Ile Tintamarre (18°07'N., 62°59'W.) lies about 1.7 miles off the NE side of Saint Martin. The island is bordered by a coral reef on all sides except the W, where landing can be effected.

There are depths from 16.2 to 21.5m in the fairway between Ile Tintamarre and Saint Martin, but this channel should only be used in good weather.

There is temporary anchorage for small vessels, in depths of 14.6 to 16.5m, about 0.5 mile W of Ile Tintamarre.

It is reported that small craft may anchor in depths of 7m under the lee of Ile Tintamarre, off the beach in Baie Blanche.

The E coast of Saint Martin is foul and frequently battered by heavy swells. Vessels should keep E of a line drawn from the E extremity of Ile Tintamarre to Molly Beday, 6 miles SSW.

A Marine Park, best seen on the chart, encompasses Ile Tintamarre and the E coast of Saint Martin.

Baie Orientale (18°06'N., 63°01'W.) lies on the NE side of Saint Martin. The bay affords anchorage for small vessels with local knowledge, but it is exposed to the prevailing winds. Ilot Pinels lies close off the N entrance point of the bay. Access to Baie Orientale is difficult.

Etang aux Huitres (Oyster Pond) (18°03'N., 63°01'W.), a small bay, lies about 2.5 miles S of Baie Orientale. Small craft can obtain sheltered anchorage in a depth of 3m, even during hurricane season.

The bay is entered through a break in the reef. Entrance should not be attempted without local knowledge.

Caution.—Dangers extend up to 2 miles offshore between Oyster Pond and Point Blanche.

8.20 Great Bay (Groot Baai) (18°01'N., 63°03'W.) is entered close W of Point Blanche and is the principal anchorage of Sint Maarten. The W side of the bay consists of a narrow rocky peninsula, on the summit of which stands the ruins of Fort Amsterdam.

A prominent radio mast stands about 137m SSW of Fort Amsterdam.

Between the entrance points the bay is clear of dangers, but its head is bordered by a flat shelf, with irregular depths 1.9 to 3m, extending from 0.2 to 0.3 mile offshore. The depths over the shelf are liable to change.

A light is shown from **Fort Amsterdam** (18°01'N., 63°04'W.). It has been reported (2001) that Fort Amsterdam light is extinguished 4 hours after sunset.

An L-shaped concrete pier known as the A C Wathey pier, 275m in length, extends SW from the coast about 0.1 mile N of Point Blanche. There is a depth of 10.4m alongside the pier, which is unprotected from the prevailing swell. A conspicuous tank is situated close S, and several prominent tanks 0.4 mile N, of the root of the pier.

Close N of the root of the pier there is a quay, 100m in length. There are two yacht marinas on the E side of Great Bay. An extensive land fill and cruise ship pier construction project has been partially completed on the E side of Great Bay

between the Great Baai marina and quay previously described. A 560m jetty remains under construction with the wharf now complete. Both projects are best seen on the chart.

Anchorage.—Anchorage can be taken in 11m midway between the two entrance points with Point Blanche bearing 110°. When there is no swell, anchorage can be taken farther N in about 8.2m with the extremity of the W entrance point bearing 270°, distance 0.5 mile, but vessels should not proceed farther inshore.

8.21 Philipsburg (18°01'N., 63°03'W.) (World Port Index No. 11370) stands on a narrow bank of sand, which separates the head of Great Bay from an inland salt pond. It is the principal town and government seat of the Dutch part of the island.

Pilotage.—Pilotage is compulsory. Pilots board at the halfway point between Point Blanche and Fort Amsterdam.

The pilot can be contacted via VHF channel 12. St. Martin Harbor Master is available on VHF channels 12 or 16 and via "Saba Radio" for telephone connection to the harbor office. Vessels should request a pilot 24 hours in advance.

Anchorage is in the Great Bay Harbour. Pilot is not required to board. The minimum approach depth is 11m and the minimum depth alongside 9.1m.

Cole Bay Oil Terminal (18°01'N., 63°05'W.) lies about 1.7 miles WNW of Great Bay. It is an exposed bay on the S coast of Sint Maarten identifiable by conspicuous tanks and a combination power plant and desalination facility.

The terminal consists of two berths at the mouth of the bay. The W berth has three mooring buoys with a depth alongside of 9.5m. The E berth has four mooring buoys and is closer inshore. Pilotage is not required but is recommended on the first visit.

Anchorage with good holding ground is available 0.5 to 1.0 mile S of the mooring complex.

8.22 Simson Baai (18°02'N., 63°06'W.) lies about 3 miles WNW of Great Bay and is entered between Pelikaan Punt and a point about 1 mile to the WNW.

The bay affords anchorage, with the best berth being midway between the entrance points in depths of 8.2m.

This anchorage is reported to be exposed to the ground swell. Two mooring buoys are located in the N central part of the bay. In the NE corner of the bay a boat channel leads into a large lagoon, which is frequently closed. A dangerous wreck is found just N of the E entrance to the bay. Prinses Juliana Airport lies on the NW side of Simson Baai.

Anchorage is prohibited off the W end of the runway while the airport is in operation. A light is shown from the control tower of the airport.

On the NW coast of Ile Saint Martin, **Pointe du Cannonier** (Pointe Basse Terre) (18°04'N., 63°09'W.) is low and sandy, with a submerged spit extending 0.7 mile to the W.

Caution should be taken rounding the point at night as the high land of the interior gives the point the appearance of being farther off than it really is. By day and in clear weather, the edge of the spit is easily visible.

Baie du Marigot (18°04'N., 63°06'W.) lies about 2.5 miles E of Pointe Basse Terre and is entered between Pointe Falaise and Pointe Arago, 1.7 miles ENE.

Baie Marigot is divided into three bights by small projections. On the NE projection, which is located about 1 mile S of Pointe Arago, is a hill 61m high, on the summit of which stands the ruins of Fort de Marigot.

The bight between Pointe Arago and the fort is known as Baie de la Potence. The SW projection, 0.8 mile WSW of Fort de Marigot, rises to Morne Rond, a prominent hillock 16m high. Mont Diamant, 275m high, is a prominent hill one mile ESE of Morne Rond, near the N end of the short W chain of the central mountains of the island.

Mont de Marigot, with an elevation of 178m stands 0.3 mile NW of Mont Diamant and must not be mistaken for it. The bight between Morne Rond and Pointe Falaise is known as Baie Nettle.

A radio tower stands 0.2 mile SSW of Fort de Marigot.

8.23 Marigot (18°04'N., 63°05'W.) (World Port Index No. 11360), the capital and port of entry for the French part of Saint Martin, lies SE of the ruined fort. A light is displayed WSW of the fort.

A pier, at which ships drawing up to 3.5m can berth, projects NW from the point on which Fort de Marigot stands. A vessel should approach the pier with the light ahead bearing 143°.

Two SBMs, best seen on the chart, lie close E and NE of Pointe Falaise.

Anchorage.—Baie de la Potence, about 0.5 mile N of Marigot Light, affords good shelter to coasters from all but W winds, which rarely blow with strength. Several mooring buoys are located in the bay. A pier with a light at its head extends SW into the bay close N of the mooring buoys.

This bay is clear of dangers in its N part, with depths of over 4m from 0.1 to 0.2 mile offshore. In the S part a shoal with a depth of 2.4m, lies 0.3 mile N of Marigot Light.

Baie Grande Case, three miles NE of Baie du Marigot, provides anchorage for small vessels in 5.5 to 7.3m.

Saint Barthelemy

8.24 Saint Barthelemy (17°54'N., 62°50'W.), a French island, lies about 11 miles SE of Saint Martin, and is separated from it by Saint Barthelemy Channel. The coasts of the island are very irregular and indented by many small bays separated from one another by precipitous rocky promontories.

The island can be identified by a group of hills, which lie close together on its E side. The N and E coasts of the island are boarded by a coral reef which is always visible.

The coasts of Saint Barthelemy are very dangerous at night, particularly its N side, off which there are a number of islets and rocks. This side should always be approached with greatest caution.

Saint Barthelemy Channel is about 5 miles wide between the off-lying dangers on either side and may be freely navigated by day, but at night it is dangerous, as the depths of from 22 to 25.6m are so regular, that they give no indication of the proximity of the rocks on either hand.

Rocher Table (17°58'N., 62°56'W.) lies 4.5 miles NW of the NW extremity of Saint Barthelemy. The island is steep-to on all sides and almost barren. Groupers, SW of Rocher Table, is a nearly barren islet with steep sides. A number of low-lying rocks lie on a reef that extends SW from Groupers.

Ile Fourchue (17°58'N., 62°54'W.) is the largest and highest of the islets NW of Saint Barthelemy. The islet has five pointed hillocks which from a distance appear as separate islets.

Anchorage, sheltered from the prevailing winds, may be taken by small vessels with local knowledge, in the bay on the SW side of the Ile Fourchue.

It is reported that this bay also provides excellent anchorage for small craft, in depths of 6m, off the beach.

A dangerous rock lies about 0.2 mile WSW of the S extremity of the island. Local knowledge is required.

Landing can be effected on a sandy beach in the NE corner of the bay.

8.25 Ilot Boulanger (17°57'N., 62°52'W.) lies about 1.5 miles E of Ile Fourche. The islet is small, barren and rocky. Ile Pele (Ile Navire) lies 0.2 mile farther E.

Ships should not attempt to pass between these islets. Ilot Baril de Boeuf, a small black rock, lies about 1.5 miles W of the NW extremity of Saint Barthelemy.

Ile Chevreau and Ile Fregate are two high islets, covered with grass and bushes, which lie off the N coast of Saint Barthelemy. Ile Toc Vers is a pointed islet located 0.7 mile E of Ile Fregate The passage between the two islets should not be attempted. Ilot La Tortue, which is flat and rocky, is located about 0.5 mile NW of the NE extremity of Saint Barthelemy.

Ile Coco is rocky with a wooded summit and lies 0.5 mile S of the S coast of Saint Barthelemy.

Caution.—Nature reserves have been established around Saint Barthelemy, Ile Fourchu, Ile Fregate, and Ile Toc Vers. The area limits are best seen on the chart.

Gustavia (17°54'N., 62°51'W.)

World Port Index No. 11380

8.26 Gustavia is the capital and principal port of Saint Barthelemy. The port lies on the W coast of the island. A light is shown on Fort Gustavia, which stands on the N side of the port. The tidal rise in the port is small and influenced by the wind. The port basin shows depths of less than 5m, shoaling about 0.1 mile from its head.

Depths—Limitations.—On the NE side of the basin, the Main Dock, with a length of 80m and a depth of 5m alongside, provides 6 berths and a ro-ro facility. The Fish Dock is at the SE end of the Main Dock.

On the SW side of the basin, there is a privately owned quay and 2 small jetties.

Pilotage.—Pilotage is compulsory and should be requested through the Port Captain. Requests for a berth must be placed at least 48 hours in advance of ETA. The harbor may be contacted by VHF channels 16 or 10.

Anchorage.—Anchorage is available in a depth of 13m, with Fort Gustavia light bearing 108°, La Baleine Light bearing 200°, and a NE tangent of Gros Ilets bearing 147°.

Anchorage can be obtained in depths of 11m with Fort Oscar, 0.2 mile SW of Fort Gustavia, bearing 133° and La Baleine bearing 225°.

Vessels over 1,600 grt carring hydrocarbons or dangerous cargo must anchor $0.7\,\mathrm{mile}\ N$ of Le Pain de Sucre.

Inner anchorages, with a least depth of 4.9m, is available to the E of Gros Ilets. This anchorage is sheltered from the prevailing winds but is exposed to the SW and W, and is unsafe during the hurricane season.

It is reported that anchorage is prohibited in the fairway to the inner port.

Caution.—Several dangers lie in the approach to Gustavia. Gros Ilets lie on a reef 0.4 mile WNW of Fort Oscar. La Baleine, a small rock, awash, and marked close W by a lighted beacon, lies about 0.2 mile W of Gros Islets; a 5m patch lies 91m S of La Baleine.

The passage between La Baleine and Gros Ilots has a least depth of 9.1m. Les Saintes are three low rocky islets about 0.2 mile SW of Fort Oscar and lie on a reef which extends 0.1 mile NNE from the center islet.

Vessels are urged to contact the local authorities for the latest information on this port before planning a voyage here.

A marine sanctuary, the boundaries of which are best seen on the chart, lies in the approach to the harbor.

Saba

8.27 Saba (17°38'N., 63°14'W.), which is a Netherlands Antillies territory, is a prominent island, located about 26 miles SW of Saint Barthelemy. The island rises nearly perpendicularly from the sea, but Mount Scenery, its 870m high summit, which is reported to be visible for 30 miles on a clear day, is usually enveloped in clouds. The island is a mass of rugged mountains, with deep precipitous ravines.

The coast forms virtually no bays or bights, and the mountains fall off so steeply into the sea that there is nothing that can be called a beach.

Two conspicuous radio masts stand on the island at the summit of Mount Scenery and on Paris Hill. A light is exhibited at Saint John's, 0.5 mile ENE of Fort Bay.

There is a small harbor in Fort Bay, which provides good shelter from the prevailing NE wind and E swell.

A breakwater projects 91m from the shore of the harbor. The N side of the breakwater is quayed with depths of 7.3m alongside its outer end shoaling to 3.4m at its root. A pilot is available if requested in advance.

Anchorage.—There are three positions off Saba where anchorage may be obtained: off Fort Bay, in Ladder Bay and close W of Torrens Point. There is good temporary anchorage off Fort Bay about 0.1 mile from the head of Fort Bay breakwater, in a depth of 15m, good holding ground, but the anchorage is exposed to E winds.

There is a good temporary anchorage in Ladder Bay, when the weather is good, in depths of 17 to 22m, with the stone steps at Ladder Landing bearing 152° about 0.2 mile. This anchorage is generally considered the most suitable for a prolonged stay. Anchorage is also available in Wells Bay close W of Torrens Point in 22 to 27m, sand bottom. The bank is steep in this area and a kedge anchor is advised to prevent swinging.

Caution.—A rock that is awash, lies about 0.3 mile WSW of Torrens Punt. A prohibited anchorage area lies off the W coast of the island between Tent Point and Ladder Bay as shown on the chart.



Courtesy of Bill Fry

Saba

Saba Bank

8.28 Saba Bank (17°2'N., 63°25'W.) is an extensive bank, with its NE side lying about 2.7 miles SW of the island of Saba. From here the bank extends about 34 miles SW, with a least reported depth of 7.3m located about 9 miles SW of Mount Scenery. A depth of 8.2m lies about 10 miles S of the island.

The E side of the bank is fringed with a ridge of living coral, sand and rock, nearly 30 miles in length. The depths over the ridge range from 11 to 35m.

Westward of this ridge, except for a few 16.5m and 18.3m coral patches near the S side of the bank, and a 16.4m patch near the W end of the bank, the bottom is clear white coral sand with depths of from 21.9 to 36.6m, gradually increasing towards the edge of the bank, but ending abruptly in depths of 54.9m.

In depths of under 20m, the bottom can be distinctly seen. The current over Saba Bank is reported to be negligible.

Caution.—Reports have indicated that shoal patches, with less water than charted may be encountered on Saba Bank. Deep-draft vessels, particularly those drawing 12m or more should remain outside of the 100m curve where possible.

It is reported that oil rigs working on Saba Bank are very well lit but that they use large off-lying buoys which are not lit.

Sint Eustatius

8.29 Sint Eustatius (17°29'N., 62°59'W.), a Dutch island, has its N extremity lying about 14 miles SE of the island of Saba. The island is dominated by an extinct volcano near its SE extremity.

The island is devoid of trees except for the slopes of the volcano. A group of rugged hills are located in the NW part of the island.

Caution.—Vessels navigating off the W side of Sint Eustatius are advised to keep a good look out in order to avoid fish pots, up to 3 miles off the coast.

An SBM is located about 1.2 miles WSW of the N point of Sint Eustatius; a submerged oil pipeline extends ESE to the shore.

8.30 Oranjestad (17°29'N., 62°59'W.) (World Port Index No. 11390) is located in Oranjestad Baai, on the SW side of Sint Eustatius. A culvert appearing like a set of stairs descends the hill fronting Oranjestad, and is conspicuous from SW. It may be identified by a conspicuous white flagstaff inside the walls of a fort, which fronts the town.

The town sits on a flat plain, between and lower than the hills mentioned above. A steep-to hill, with a switch-back road cut into it, fronts the town. Storm signals are displayed by day only and are identical to U.S. storm signals.

Tides—Currents.—Currents have been observed at the jetty up to a rate of 2.5 knots N, and 1.2 knots S, their maximum rates occurring at springs. Depths of 20.1m lie between Saint Eustatius and Saint Christopher.

Depths—Limitations.—There are channel depths of 9 to 12m over a width of 228m.

City Pier, a 60m long berth protected by a breakwater, stands at the S end of Oranjestad Baai. Vessels with a maximum draft of 4m can be accommodated. This pier, 350m long and marked by a light at its head, extends WSW of the coast in Gallows Bay just S of the town.

A jetty, with depths alongside of 19m extends 0.5 mile WSW from the S side of Tumble Down Dick Bay 1.5 miles of the N point of Sint Eustatius. A light is exhibited at the head of the jetty. A platform, pipeline, and two mooring buoys are located close N of the jetty.

No. 1 Berth, on the S side of the jetty can accommodate vessels up to 175,000 dwt. No. 2 Berth, on the N side of the jetty, can accommodate vessels up to 100,000 dwt.

Aspect.—A light is exhibited, at an elevation of 40m, at Oranjestad.

The approach is free of charted dangers.

Pilotage.—Pilotage to and from the jetty is compulsory. An ETA is required 72, 48, and 24 hours in advance. Pilots, equipped with VHF channels 14 or 16, are available by day and at night and board 2 miles seaward of the jetty.

The terminal should be contacted by VHF for berthing and anchoring instructions about 4 hours prior to the arrival of the vessel. There are two tugs.

Anchorage.—There are a few rocky spots, which should be avoided but, generally speaking, the bottom is sandy and the holding ground good.

It is reported that an uncomfortable swell often runs in the bay.

The best anchorage is about 0.4 mile offshore, in a depth of 18m, sand, with the SE church bearing 073° and the SW extremity of the island in line with Brimstone hill, Saint Christopher, bearing 131°.

Three anchor berths, designated A, B, and C, are located as best seen on the chart.

Caution.— A stranded wreck exists on the shore in the N part of the bay SSE of Fort Royale.

Saint Christopher (Saint Kitts)

8.31 Saint Christopher (Saint Kitts) (17°20'N., 62°45'W.) is of volcanic origin, and lies about 6.5 miles SE of Saint Eustatius. The island is nearly divided into two parts at its SE end, being connected by a narrow neck of sand.

Mount Misery (17°22'N., 62°48'W.) rises conspicuously to form the summit of the rugged central ridge at the NW part of the island. The summit is usually covered with clouds.

Further SE a radio mast stands at the summit of Ottleys Hill. A light is shown from a tower 2 miles E of Monkey Hill just E of the airport. Brimstone Hill, 2.5 miles SW of Mount Misery, is prominent and easily identified by fortifications on its summit.

Sandy Point Village is situated about 1.5 miles NW of Brimstone Hill. A short pier, on which a light is exhibited, lies at the N end of the village. A church, having a yellow tower with a red top, stands about 0.5 mile SE of the pier.

Anchorage.—The best anchorage lies off the village in depths from 9 to 11m. Good marks for anchor bearing are reported to be the village church and a short pier which shows a light.

Temporary anchorage can be taken in Old Road Bay, 2.5 miles SE of Brimstone Hill, in a depth of 16.5 to 18.3m, a short distance SE of the village, and about 0.3 mile offshore.

Small craft can find good anchorage in Ballast Bay 0.6 mile NNE of **Rock Point** (17°14′N., 62°39′W.) in depths from 2.7 to 5.5m, sand, and also in the bay 0.4 mile NNW of Horse Shoe point, in a depth of 5.5m, sand bottom.

Majors Bay, on the E side of Horse Shoe Point, provides sheltered anchorage for small craft at the N end of the bay, in a depth of about 4.6m.

Caution.—Caution is advised as the hydrography is incomplete around Saint Christopher and Nevis.

8.32 Basseterre (17°18'N., 62°43'W.) (World Port Index No. 11400) is the capital of Saint Christopher and is situated on the SW side of the island, at the head of Basseterre Bay. The bay forms an open roadstead and is free from dangers, except for two dangerous wrecks, best seen on the chart.

Depths—Limitations.—Saint Kitts Deep Water Port, has a main berth, which at the SW end, has a length of 122m and a depth of 7.3m alongside. A mooring buoy extends the berth to accommodate larger vessels.

The ro-ro terminal, NE of the main berth, is 120m in length with a depth alongside of 4.8m, and is designed to take ro-ro ships, containers, and flat top barges. With the aid of berthing dolphins, it is possible to accommodate vessels up to 213m in length.

Port Zante Cruise Terminal has been constructed WNW of Saint Kitts Deep Water Port. The terminal is designed to accommodate vessels of 274m length and 74,000 tons displacement.

Aspect.—Conspicuous objects include the white chimney of a sugar factory, 86.3m high, about 0.5 mile NNE of the E end of the town; the obelisk of the War Memorial about 0.2 mile NE of Fort Thomas light; and a sugar warehouse, on the E side of the bay, 0.4 mile N of Fort Smith.

Pilotage.—Pilotage is not compulsory The boarding ground is situated about 0.5 mile seaward of the port. Vessels should send ETA 24 hours prior to arrival. Tugs are not available but a launch can be used to assist in berthing.

Anchorage.—Anchorage can be taken in 14.6 to 16.5m, sand, with the conspicuous obelisk bearing 306°, distance 0.7 mile.

Good anchorage for small vessels may be found, in a depth of 9.1 to 11m, with the cupola on the Treasury building bearing 000°, distance 0.2 mile.

The Narrows

8.33 The Narrows (17°13'N., 62°37'W.) is the name given to the channel between the SE end of Saint Christopher and the NW extremity of the island of Nevis. The channel is about 1.7 miles wide and is navigable by vessels drawing up to 5.5m with local knowledge.

Good anchorage can be obtained in the W part of the channel in a depth of 11m, with Mosquito Bluff bearing 022°, and the N extremity of Nevis bearing 087°, good holding ground.

Nevis

8.34 Nevis (17°09'N., 62°34'W.), a British island, lies almost 2 miles SE of Saint Christopher, and is of volcanic origin. Nevis Peak rises in the center of the island and is mostly cloud covered. Hurricane Hill (Round Hill) stands on the N side of the island and is easily identified, being large, and rising to a peak.

Nevis is reef-fringed except for a short stretch on the NW side and should not be approached in depths of less than 20m unless proceeding to the anchorage off Charlestown.

A light is exhibited from off Dogwood Point approximately 2.7 miles SSE of Fort Charles.

8.35 Charlestown (17°08'N., 62°37'W.) (World Port Index No. 11410), the capital of Nevis, is situated on the W coast of the island. A concrete pier, projects 118m from the coast, with depths from 3.4 to 4.5m alongside. Landing steps on the N side of its head projects abreast the town.

A prominent radio mast stands near the root of the pier. Two oil tanks, are situated close S of the root of the pier.

Signals.—A pennant is displayed when winds between 28 and 33 knots are expected. A red flag with black center is displayed when winds between 34 to 63 knots are expected. When a hurricane is expected two red flags with black centers are displayed; at night red flares are used. All signals are displayed from the Belfry, approximately 1.5 miles NNE of the root of the pier.

Anchorage.—During the prevailing NE winds, anchorage can be taken 0.5 mile W of the pier off Charlestown, in 9.1 to 11m.

In has been reported (1992) that two mooring buoys, about 90m apart, lie about 0.1 mile offshore from a petroleum tank farm, 0.8 mile SSE from Fort Charles Radio Station Light in the vicinity of Long Point.

8.36 Redonda (16°56'N., 62°21'W.), a barren rocky islet, lies about 15 miles SE of Nevis.

Redonda stands on a detached bank with depths on it between 43.9 to 54.9m.

The bank extends 9 miles N and 4 miles SW of the islet. The only landing place is a small pier on the S side.

Anchorage.—Anchorage can be taken in 32.9 to 36.6m, sand, about 0.3 mile NW of the pier.

Pinnacle Rock lies 0.2 mile off the SE side of Redonda.

Montserrat

8.37 Montserrat (16°45'N., 62°12'W.) lies about 11 miles SE of Redonda. The island presents a rugged and uneven appearance from seaward. A number of peaks, wooded to their summits, are sometimes enveloped in clouds.

The highest peak which has an elevation of 914m is attained near the S end of Soufriere Hills. The coasts of the island are bold and steep-to.

The 20m curve lies in places within 0.2 mile of the island. Depths of less than 12.8m extend nearly 0.5 mile W from Bransby Point, the W extremity of the island.

Tides—Currents.—Tidal currents along the coast attain a rate of about 0.5 knot, except off the N and S extremities, where the W currents attain rates of up to 2 knots but the E currents are weak.

Aspect.—A light for the use of aircraft is exhibited near the SW point of Montserrat, 1.2 miles SW of the summit of South Soufriere.

Two lights for the use of aircraft are exhibited in the vicinity of Blackburne airport on the E coast 1.5 miles ENE of the summit of Center Hill.

Radio masts stand 1.5 miles NNE of the summit of Center Hill.

8.38 Plymouth (16°42'N., 62°13'W.) (World Port Index No. 11420), the capital of the island, is situated on the SW side of the island. There are number of good landmarks about the town which can best be seen on the area chart.

Depths—Limitations.—Abreast the town there is an area of reclaimed land from which an L-shaped jetty projects nearly 91m WSW. The jetty head is 55m long, with a collapsed dolphin off its SE end that has become an obstruction with an unknown depth.

A vessel approaching the jetty from S should do so with caution

Another obstruction, marked by a buoy, is situated about 35m NW of the jetty head. This jetty was destroyed in 1989 by a hurricane.

A new concrete jetty extends 200m S from the root of the destroyed L-shaped jetty. The W berth, which is 74m long, can accommodate cargo vessels up to 122m long and cruise ships up to 168m long.

Depths alongside have been reported (1994) to be 25m at the S end and 10m halfway along the causeway, with depths then shoaling rapidly towards the shoreline. The E berth can accommodate ro-ro vessels up to 94m long; caution is necessary as less water than charted has been reported (1996) alongside the E berth.

There are two mooring buoys, about 137m offshore, in a depth of 7.3m, abreast the tanks.

Pilotage.—Pilotage is compulsory for vessels over 300 tons. A pilot is available on requests.

Anchorage.—The recommended anchorage for large vessels is in 16.5m about 0.5 mile offshore, about 1 mile WNW of the town. Small vessels can anchor anywhere off the W side of the island, including Cars Bay, Old Road Bay, and Fox Bay.

There is a prohibited anchorage off Plymouth, the limits of which can best be seen on the chart.

Caution.—Due to continued volcanic activity on the island of Montserrat, mariners are advised to avoid the area. The area W of Montserrat is subject to heavy ash falls. It is reported (1997) that a delta is forming on the E coast in the vicinity of 16 43.1'N, 62 07.6'W Toxic gases and abnormally high seas may be expected S of Montserrat. The port of Plymouth is closed until further notice.

Barbuda

8.39 Barbuda (17°38'N., 61°48'W.) lies about 58 miles ESE of Saint Barthelemy. The island is low, sandy, and scantily wooded on its N, S, and W points.

A hotel, partly obscured by tall shrubs and visible from a considerable distance under favorable condition, stands on Cocoa Point. It has been reported (1992) that another hotel, with a water tower and a red roof, had been constructed close to the point.

Martello Tower, partly ruined and difficult to identify because of the surrounding trees, stands near the beach about 2 miles E of Palmetto Point; under favorable conditions, the tower is visible from a considerable distance.

About midway on the E coast, a two mile stretch of cliffs, rise to a plateau called The Highlands, which is the highest part of the island. It stands out well and is a prominent feature.

Caution.—Palmetto Point is reported to be extending S.

8.40 Codrington (17°38'N., 61°49'W.), the only settlement on the island, is fronted by a shallow lagoon which occupies about all the W part of the island. Depths in the lagoon are from 1.5 to 3.7m. In the village is a church; and in front of the village is a landing wharf.

Barbuda is administered from Antigua, to which it is linked by radiotelephone; there is a government office and a police station on Barbuda.

There is an airstrip immediately S of Codrington from which there are flights daily to Antigua. Another airstrip at Cocoa Point is privately owned.

Reefs, which dry in some places, fringe the E side of Barbuda, 0.5 to 0.7 miles offshore. Cobb Reef, a continuation of the reef on the E side of the island, lies up to 1.5 miles offshore and fronts a foul bight between Hog Point and Goat Point, the N extremity of Barbuda.

Caution.—Caution is advised when passing N of Barbuda because of the low N end and the fronting reefs are fully 7 miles N of the Highlands, which should not be taken for the N end

The greater part of the W coast of the island is a low sandy ridge of land which separates the lagoon at Codrington from the sea. Numerous detached coral heads on which the sea does not break, extend up to 2.5 miles off the NW end of the island Goat Reef lies at the N extremity of the coral patches, and extends about 2.5 miles N of Billy Point.

The S side of Barbuda is the most dangerous and must be approached with caution for soundings are of little help. Palmetto Point, the SW extremity, was reported to have extended nearly 1 mile SW.

Between Cocoa Point and Spanish Point, at the SE part of Barbuda, a bank extends about 2 miles S from the coast.

Palaster Reef, nearly awash and always visible, is on the outer edge of the bank.

8.41 Codrington Bank (17°28'N., 61°47'W.), in the middle of which there is depth of 9.4m, extends about 4.5 miles S of the extremity of Dodington Bank.

Two banks, with depths of 14.6m and 13.1m, lie 3 miles W and 3.7 miles WSW, respectively, of the S end of Codrington Bank.

A shoal, with a least depth of 13.1m, lies about 3 miles E of the S end of Codrington Bank.

There may be less water than charted on the banks and shoals described above.

A dangerous wreck is situated off the E coast in position 17°38'35"N, 61°44'10"W.

A depth of 9.1m has been reported in position 17°45'12"N, 61°50'45"W.

Codrington Shoal, with a least depth of 4m lies 5 miles SSE of Palmetto Point. Dodington Bank, 5.5 miles SE of the same point shows a least depth of 4.6m.

A depth of 3m lies about 1.5 miles S of Dodington Banks.

Good anchorage may be obtained on the S side of the island, in a depth of about 10.1m, with **Palmetto Point** (17°35'N., 61°52'W.) bearing 293°, and Martello Tower, bearing 012°, distant about 1.2 miles.

When approaching this anchorage, care must be taken to keep the Martello tower bearing not less than 012°, in order to avoid Codrington Shoals.

Anchorage.—During prevailing winds, good anchorage can be taken in 11m about 3 miles off the W side of Barbuda.

The anchorages are exposed to rollers from November to May.

A small boat harbor, consisting of a wooden wharf, is situated on the W side of an L-shaped neck of reclaimed land about 0.7 mile E of the Martello Tower.

It is the only port of entry into Barbuda and the main landing place for boats plying between Antigua and Barbuda.

Sand from a sand-mining operation carried on between the Martello Tower and Palmetto Point is loaded at a terminal situated at the seaward end of the reclaimed neck of land.

Antigua

8.42 Antigua (17°05'N., 61°47'W.) lies with its NW extremity 24 miles S of Barbuda. Saint John's, on its NW side, is the capital and the only town of importance.

The island is of moderate elevation and its heights, which are more or less confined to the SW part, are seldom obscured. Boggy Peak, the highest on the island, is conspicuous and is identified by a lighted radio mast on its summit.

Antigua is deeply indented on almost every side, this is particularly so on its NE side where there are many bays and creeks navigable by small vessels. The island should be approached with great caution as less water than charted may be encountered.

The N coast of Antigua is fronted by a line of coral shoals, best seen on the area chart. Boon Channel lies between the shoals and the coast, offering an approach to North Sound, Parham Sound, and Parham Harbour.

Diamond Bank, Salt Fish Tail, and the other dangers in the approach channel are described in paragraph 8.48.

Boon Bay (17°10'N., 61°49'W.) and Port Royal Bay lie between Boon Point and Beggars Point, about 1.7 miles E.

The shores of Boon Bay are low, rocky and fringed by shoals. A chain of irregular hills extends about 2 miles SE of Boon Point.

Mount Pleasant, the highest, has an elevation of 134.7m and may be identified by its flattened summit. Judge Bay is the only place in the area where a landing can be made.

Hodge Hill, 46.9m high, with a tower on it, lies about 0.2 mile W of **Beggars Point** (17°10'N., 61°48'W.) and is prominent.

There is a prominent hotel situated about 0.3 mile S, and another hotel about 0.2 mile W of the same point.

A wind turbine, with an elevation of 168m stands on New Winthorpes hill 0.3 mile SE of the summit of Mount Pleasant. Prickly Pear Island, which shows a light, lies less than 0.5 mile NNE of Beggars Point.

Jarvis Shoal (17°12'N., 61°49'W.) lies about 1.5 miles NW of Beggars Point. Horse Shoe, a reef, which is awash at LW, lies about a mile E of Jarvis Shoal.

Kettle Bottom Shoals forms the E part of a chain of reefs and shoals which extend around the N side of Antigua to a position close NW of Bird Islet Reef.

Long Island (17°09'N., 61°45'W.) lies to the SW of Bird Islet Reef. The island is low, but has some trees on its W side. Three Fathom Bank, about 1.7 miles NE of Long Island, has a least depth of 5.5m.

Four Fathom Bank, the outermost danger, lies about three miles NE of Long Island, and has a least depth of 4.1m.

8.43 Parham Sound (17°09'N., 61°47'W.) is approached from Boon Channel, between a reef extending N of Beggars Point (Hodge Point) and **Ward Shoal** (17°11'N., 61°47'W,.) with a least charted depth of 0.9m. Horse Channel offers access to Boon channel and Parham Sound, but is unmarked, and not recommended.

The sound offers anchorage for vessels with local knowledge, clear of the shoals, shoal patches, and named dangers, best seen on the area chart. The holding ground within the sound is reported to be good, and protected from rollers.

A jetty, with a length of about 107m and depths of 7.3 to 7.6m alongside its outer part, extends E from **High Point** (17°09'N., 61°47'W.). Shoal water lies 0.1 mile N and S of the jetty. A considerable swell is experienced at the jetty during periods of strong winds.

High Point is a liquefied gas terminal, normally used by tankers. Ro-ro facilities are reported to be available.

8.44 Parham Harbour (17°08'N., 61°46'W.) (World Port Index No. 11440) is entered between the point situated one mile SE of High Point and Crabs Point, about 1.2 miles E. A Theaded pier projects 0.1 mile from the shore, 0.5 mile SSW of Crabs Point.

The pier has a depth of 6.1m alongside its head. This jetty has bulk handling facilities for cement and facilities for ro-ro vessels. It is approached from Parham Sound by dredged channel, 91m wide and marked by buoys, which leads close SW of Maiden Island. The channel has a least depth of 4.9m.

Anchorage can be taken by vessels with local knowledge in 12.8m in North Sound about 0.4 mile E of Maiden Island.

8.45 Guaina Island (17°07'N., 61°44'W.) lies with Nibbs Point, its SW extremity about 1.5 miles S of North Sound Point. A coral reef extends about 1.7 miles N from the N extremity of Guaina Island. Numerous islets and islands lie on this reef.

Between Guaina Island and Indian Town Point, about 2.5 miles SE, the coast is irregular and is indented by two bights, Guaina Bay and Mercers Creek Bay (Belfast Bay).

Both bights are well sheltered by the islets and reefs extending across their entrances, and have sufficient depths for coastal vessels, but the channels are intricate and the approaches dangerous.

Between Indian Town Point and Man of War Point, about 2.2 miles SSE, reefs extend in an almost direct line. A conspicuous white house stands on Friars Head, 1.7 miles SSW of Man of War Point.

Nonsuch Bay (17°04'N., 61°41'W.) is entered between Man of War Point and York Island, about 1 mile SW.

The bay is completely protected by reefs, which nearly dry, and is a secure harbor. Entrance is difficult and should not be attempted without local knowledge. In the harbor there are general depths of from 9.1 to 14.6m.

8.46 Willoughby Bay (17°02'N., 61°44'W.) is entered between Hudson Point and Isaac Point about 2.5 miles WSW.

The bay affords anchorage for vessels of moderate size, but it is so dangerous that it is seldom used. The entrances are narrow and intricate. A light is shown on Cape Shirley, situated about 2 miles SSW of Willoughby Bay.

Mamaro Bay is entered between the W entrance point of Willoughby Bay and **Indian Point** (Standfast Point) (17°00'N., 61°44'W.), the extremity of a projection, about 0.5 mile S. It was being developed as a holiday resort and yacht marina.

Anchorage.—A bar, with a least depth of 2.5m, lies across the mouth of the bay. A channel across the bar leads into the bay and is marked by spar buoys.

The bay affords safe anchorage in soft coral sand for small craft except in very strong E or S winds. Depths are generally between 3 and 4m. After passing the inner pair of buoys, small craft may anchor as convenient or head for the large wooden jetty.

A T-headed wooden jetty affords 22 berths for yachts up to 45m in length, and moorings are available for larger craft.

English Harbour (17°00'N., 61°46'W.) is entered between Charlotte Point and Berkeley Point. The entrance channel to the harbor is about 91m wide, with depths of 5.5 to 7.3m.

Range lights lead into the harbor. The port authorities may be contacted on VHF.

Anchorage.—Good anchorage for small vessels can be obtained in Freeman Bay, with Freeman Point bearing 353° and Berkeley Point bearing 265°, depth 7m. Large vessels may anchor in depth of 27.4m, 0.3 mile SSW of Berkeley Point.

8.47 Falmouth Harbour (17°01'N., 61°47'W.) lies about one mile W of English Harbour. The harbor affords anchorage for a few vessels drawing up to 3m draft, but is seldom used except by small craft.

Range lights, each shown from a wooden pile, are situated at the head of the harbor: the front light is exhibited, at an elevation of 11m, about 1 mile NNE of Black's Point, the E entrance point; the rear light stands 290m NNE of the front light.

Johnston Point (17°02'N., 61°53'W.), the SW extremity, is low and rocky. A small islet lies close off the point. The point

and the islet are difficult to make out except from the NW and SE.

From Johnson Point to Pearns Point, about 3.2 miles NNW, the coast is dangerous to approach because of a coral ledge which extends up to 1.7 miles offshore.

Depths.—Limitations.—There are depths of 11.6m and 14m, 2.7 and 3.7 miles WSW and there is a depth of 11.6m, 2 miles SW, of Johnson Point.

Isolated pinnacles with depths over them as little as 11m extend nearly 10 miles WNW from Johnson Point.

Five Island Harbour (17°06'N., 61°53'W.) is entered between Pelican Point and a point faced by a distinctive red cliff, about 1 mile to the S. This harbor, though exposed to rollers, affords secure anchorage, during the prevailing winds to vessels drawing up to 4.9m.

There are depths of from 3.7 to 5.5m in the harbor, but Cook Shoal, a small rocky head, with a least depth of 2.7m, lies nearly in the middle of the entrance, about 0.5 mile SSE of Pelican Point.

8.48 Across the N approach to Saint John's Harbour lies an extensive coral reef from 1 to 2 miles off the N coast of Antigua.

Salt Fish Tail, with its E end about 1.5 miles NNE of **Boon Point** (17°10'N., 61°50'W.), the extremity of the island, extends 3.5 miles W and on it are numerous coral heads which dry in places. The reef can clearly be seen under favorable conditions.

Diamond Bank, 0.5 mile W of Salt Fish Tail, is separated from it by Diamond Channel. On it lies a coral ledge on which, though it is awash, the sea seldom breaks; when conditions are right the bank shows clearly as discolored water.

A disused metal observation tower 9m in height, reported (1996) destroyed, stands on a sunken barge lying on the western edge of the coral ledge.

A broad ridge, with depths of less than 15m, extends over 3 miles W from the coral ledge, and from it rise numerous pinnacles with depths of less than 12m.

Bannister Bank, with a least depth of 5.2m, lies 0.7 mile S of Diamond Bank.

Great Sister lies 1.2 miles WSW of Weatherills Point (one mile SW of Boon Point) at the W end of a ridge extending from the coast. It is a rocky islet, 12m high, with bushes on it and is easily identified.

Little Sister, a group at rocks 1m high, is also located on the ridge which is steep-to at its N and W edges, depths of more than 10m being found within 0.2 mile of Great and Little Sisters.

Saint John's Road, which lies between Great Sister and Goat Hill, 2.5 miles SSW, is encumbered by Warrington bank over which there is a least depth of 1.6m. The bank is marked by buoys on its N and W sides, and the sea may break on it in W or N winds.

There is a channel, 0.2 mile wide with depths of more than 10m, between the E end of Middle Ground, on which Warrington Bank lies, and James Ground, the shallow shore bank fringing the islands E coast.

In the approaches to Saint John's Harbour from S or W lies **Sandy Island** (17°01'N., 61°55'W.), marked by a light, partly covered with stunted trees and shrubs.

There is a boat channel, with a depth of 5.6m, between the coral reef on which Sandy Island lies and Weymouth Reef, 0.1 mile SW. A wreck stranded on this reef was fitted with a radar reflector.

Numerous shoals, with depths from 11 to 19m, lie in the approaches from WSW to WNW up to 10 miles from Sandy Island.

Saint John's Harbour (17'07'N., 61'51'W.)

World Port Index No. 11430

8.49 Saint John's Harbour is the capital and largest city of Antigua. It is the chief commercial port of Antigua and is safe from strong winds except hurricanes. It is exposed to swell, which, at times, can make berths at the deep water wharf uncomfortable.

Depths—Limitations.—The principal approach to Saint John's Harbour for ocean-going vessels is from NW, though smaller vessels of suitable draft may approach from SW through Sandy Island Channel.

Fort James Light, in alignment with the cathedral spires bearing 110° leads clear of the dangers in the vicinity of Sandy Island.

Great Sister, steered for on a bearing of 055°, leads through the center of Sandy Island Channel, and close aboard an 11m patch. It should be borne in mind that similar depths exist further seaward, and over the bank extending from the mainland. This channel should only be used by vessels with local knowledge.

A vessel of shallow draft may approach the harbor from N through Diamond Channel, between Diamond Bank and the W extremity of Salt Fish Tail, 0.5 mile E,. The E edge of Great Sister in line with the ruins of Denfields Mill, 3 miles S, bearing 176° leads through the channel passing close E of the least depth of 5m in the fairway.

Alternatively, the vessel may approach W of Diamond Bank with Fort Barrington in line with Mount Thomas, 1.5 miles S, bearing 173°.

In view of the proximity of shoal water with coral pinnacles neither of these tracks is recommended without local knowledge and neither should be attempted at night.

Boon Channel, entered N of Great Sister, leads round the N point of Antigua into Parham Sound, about 5 miles E, becoming narrow and tortuous at its E end.

Saint John's Harbour is approached through a buoyed channel about 90m wide.

The deep water harbor, and the turning basin, were dredged to a least depth of 10.7m. Range lights, in alignment bearing 113° mark the dredged cut.

At its E end, the dredged channel opens out into a turning basin, 366m wide, marked by a buoy at its E end and by two buoys on the S side. It was dredged to 10.7m.

To the E of the turning basin a buoyed area, dredged to a depth of 8.5m, leads to Heritage Quay, which is being developed to accommodate cruise ships.

The deep-water wharf is 0.2 mile in length, and will accept vessels with a maximum draft of 9.7m.

An offshore terminal, consisting of a multi-point mooring and sea island structure, is situated in Saint John's Road. Both facilities are connected to the shore and the refinery complex by a submarine pipeline, best seen on the chart.

The multi-point mooring will accept vessels with a maximum draft of 13m. The sea island structure will accept a vessel up to 22,000 grt, with a draft of 9.7m, and is fitted with Yokohama type fenders.

It is advised that the sea island structure not be approached via the channel from the S between Middle Ground and James Ground. The swell and prevailing winds may compel the use of tugs.

Aspect.—Boggy Peak (17°02'N., 61°52'W.), the highest on the island, Mount Thomas 4 miles NNW, and Goat Hill 1.5 miles farther NNW can be identified easily.

Saint John's Harbour may be identified from the offing by the cathedral, a massive white building with two tall towers, their tops at an elevation of 50m.

Southeast of the city is a small flat wooded ridge of moderate elevation with a distinct peak at each end; Scott Hill near its NW end, about 2.5 miles SE of **James Bluff** (17°08'N., 61°52'W.), is 97m high, and Belmont Hill (0.5 mile SSE of Scott hill) is 117m high; the former is more rounded and less well defined, but both are prominent.

Fort James Light is exhibited from Fort James close N of James bluff.

Pilotage.—Pilotage is compulsory, and should be ordered through the vessel's agent, at least 48 hours prior to arrival. Pilots for the inner harbor may be boarded off the seabuoy, while pilots for the oil terminal board about 2 miles NE of Sandy Island.

The harbor pilot may be contacted on VHF channel 16, while the berthing pilot may be reached on channel 6. The harbor authorities may be reached on 2182 kHz or channel 16.

The oil terminal, call sign "Marine Center" may be reached on 2182 kHz, or VHF channel 16.

Anchorage.—Saint John's Road offers excellent anchorage, clear of the oil terminal, in general depths of 14m. Tankers and vessels intending to bunker should anchor N and NW of Warrington Bank.

South of Warrington Bank comfortable berths may be found, in depths of 12m over good holding ground, between 0.8 and 1.2 miles ENE of Fort James Light.

An outer anchorage is available for vessels with a draft of 16.5m in position 17°10'N, 61°54'W, 2 miles NE of Sandy Island.

Caution.—The range has been reported (1995) to be difficult to distinguish during the day; the front range light is also reported (1995) to be obscured at night by an intense white light.

Guadeloupe

8.50 Guadeloupe (16°15'N., 61°30'W.) is a French possession and consists of two large islands, Basse-Terre and Grande-Terre, and several off-lying island dependencies.

Basse-Terre, the W island, is a rugged mass of lofty ridges and peaks which traverse the island NNW to SSE as a chain of almost inaccessible mountains.

La Soufriere, a volcano near the SE end of Basse-Terre, constantly emits smoke, and flames are frequently visible.

Near the center of the range rise two adjacent mountains named Les Mamelles.

A conspicuous television tower stands on the NW peak of **Les Mamelles** (16°11'N., 61°45'W.). Grande-Terre, the island, is comparatively low with two chains of hills.

Tides—Currents.—Between Guadeloupe and Antigua the current is W. Between Guadeloupe and Montserrat it is NW. In the vicinity of La Desirade Island, the current is NW with a considerable rate and W off the SW point of the island, attaining rates of two knots.

From time to time lesser depths than charted are reported in the deep water channel between Antigua and Guadeloupe.

A decade ago, two banks were known to exist. The N bank, entered about 13 miles S of **Cape Shirley** (17°00'N., 61°45'W.) had known depths of 69 to 90m.

The S bank, about 9 miles NNW of Pointe de la Grande Vigie, the N extremity of Grande-Terre, Guadeloupe, had known depths of 66 to 100m.

8.51 Pointe de la Grande Vigie (16°31'N., 61°28'W.) is the N extremity of Grande-Terre. The point has been reported to give good radar returns up to 20 miles. Anse Sainte-Marguerite, about 8 miles SSE of Pointe de la Grande Vigie, is an open roadstead encumbered by reefs.

Le Moule (16°20'N., 61°21'W.) is the only port on the NE side of Grande-Terre. The port is partly sheltered by reefs, but the anchorage space is very limited. From the month of October to the end of March, the port is unsafe.

A directional light is situated on the E side of the harbor, abreast the town. A light is shown on the shore of the harbor in front of the town.

By day, the harbor may be identified from its position in relation to the tall chimney of Duchassaing sugar factory situated about 1.2 miles SW of the W light, and to the conspicuous chimney 0.8 mile ESE of the same light.

A water tower stands 0.3 mile NW of the latter chimney. The port is little used except by coasters. Entry should not be attempted without local knowledge. The coast from Le Moule to Pointe des Chateaux, about 11 miles SE the E, is incompletely surveyed and steep-to.

From Pointe des Chateaux the coast trends about 17 miles W to Pointe Caraibe. This part of the coast is composed of sandy beaches fringed with coral and separated by irregular pointed crags. Coral reefs extend in places up to one mile offshore.

Saint Francois (16°15′N., 61°16′W.), a small port, lies about 6 miles W of Pointe des Chateaux. The port is used by small craft with local knowledge. The church in the town is conspicuous.

A directional light is exhibited from a metal framework tower on a white base, at the head of the harbor. The directional light leads through the channel in a depth of about 4m.

A jetty extends about 61m SW from the point S of the church. A light is exhibited at the head of the jetty.

During NE winds, anchorage can be obtained, in depths of from 11 to 11.9m, in a bottom of sand and broken shells, about 0.5 mile S of the town.

There is a yacht harbor, protected by breakwaters, 0.5 mile E of Saint Francois. It is approached through Passe Champagne,

a channel dredged to a depth of 5m which leads to a basin dredged to 2.5m.

8.52 Sainte Anne (16°14'N., 61°23'W.) lies about 7 miles WSW of Saint Francois. W of the village there is a wooded bluff, at the foot of which stands a square tower.

Small vessels can obtain anchorage in a depth of 4.9m.

The entrance to the bay is encumbered by a chain of reefs through which there are two passes.

Grande Passe, the E, has depths of 8.2m, but is only about 30.5m wide. The depths in Petite Passe are less than 4.6m.

A vessel should enter Grande Passe, steering for the ruined tower of Plaisance mill in line with the E extremity of the Square tower, bearing 329°.

The channel is marked on its NE side by a lighted buoy moored at the entrance to Grande Passe, and by a lighted buoy moored 0.2 mile SSE of the shoal.

Petit Cul-de-Sac Marin (16°13'N., 61°34'W.) is a large bay that lies between the SW side of Grande-Terre and the E side of Basse-Terre. The bay is entered between Ilet du Gozier and the mouth of Riviere Goyave, 6 miles SW.

The bay is encumbered by numerous dangers. The harbor of Pointe-a-Pitre is located in the NE bay area.

Depths—Limitations.—Mouchoir Carre, about 2.5 miles WSW of Ilet du Gozier, consists of two coral patches, on which lie several heads with depths from 2.9 to 4.9m. Mouton Vert consists of several coral patches, with depths of between 3.3 to 5.8m, located about 1 mile SSW of Mouchoir Carre.

Caye a Dupont (16°09'N., 61°33'W.), awash, lies about 1 mile S of the shallowest part of the NW patch on Mouton Vert. A conspicuous wreck was reported on the N side of the cay.

Caye Martinique, almost awash, extends 1 mile NE from the mouth of Riviere Goyave. Dangers extend E from Caye Martinique and Caye a Dupont, as may best be seen on the chart

Pointe-A-Pitre (16°14'N., 61°32'W.)

World Port Index No. 11450

8.53 The port of Pointe-a-Pitre is well-protected and considered to be the best in the French Antilles. The town is the commercial center of Guadeloupe.

The port can accommodate vessels up to 350m long at the container terminal in Bassin Jarry Sud though normally maximum length is restricted to 200m because, with a fresh breeze, the narrow entrance channel can be difficult for large vessels. Maximum draft is 10m.

The channel through the harbor, as far as Bassin Jarry Sud, was dredged to a depth of 11m. It is marked on either side throughout its length by buoys.

Passe Ouest, the principal channel through Petit Cul-de-Sac Marin to Pointe-a-Pitre, in which there are depths greater than 10m, passes SW of **Mouchoir Carre** (16°11.2'N., 61°31.7'W.). It is 3.5 miles long from Lighted Buoy PP to the harbor entrance.

Passe Est, the channel from Lighted Buoy PP passing NE of Mouchoir Carre, is about 0.75 mile shorter, but has depths of only 7.8m. The channel is marked by range lights, in alignment bearing 348°.

Depths—Limitations.—There are a total of 14 berths in the harbor.

Quay No. 1 is 151m in length, but will accept vessels with a maximum length of 180m. The depths alongside are 8.5m.

Quay No. 2, 180m in length, will accept a vessel up to 210m in length, and has an alongside depth of 9m.

Quays No. 3 and 4 have a combined length of 278m, and have alongside depths of 9m.

Quays Nos. 5 and 6 have a total length of 323m, with alongside depth of 8.5m. In 1990, a 4.7m shoal patch existed at the center of No. 5 berth.

Quays No. 7 and 8 have a total length of 306m, and depths alongside of 8.5m.

Quay No. 9 is a mineral berth, offering facilities to a vessel with a maximum length of 180m; alongside depths are 8m.

Quay No. 10 provides berthing facilities to oil and gas carriers. The quay will accept vessels with a maximum length of 120m, and offers alongside depths of 8m.

Quay No. 11 handles sugar and rum, and caters to vessels up to 180m in length; alongside depths are 8.5m.

Quay No. 12A handles grain commodities and will also handle a vessel with a length of 180m, with an alongside depth of 8.5m.

Quay No. 12B is a ro-ro terminal, which handles vessels with a maximum length of 60m, with an alongside depth of 6m

Quay No. 13 has a length of 160m, with an alongside depth of 11m.

Quay No. 14 serves as a container terminal, and is 240m in length, with alongside depths of 11m.

It is reported that the port can accommodate cruise vessels up to 70,000 dwt; a new cruise ship and passenger terminal known as Centre St. John Perse has been constructed in conjunction with the redevelopment of the port.

Pilotage.—Pilotage is compulsory for ships over 50m LOA. Vessels shall inform the Captain of the Port, by radio, 24 hours in advance of their arrival at the Lighted Buoy PP, where the pilot will board the vessel. The ETA should be confirmed 1 hour prior to arrival.

It has been reported (1996) that the pilot boards between Lighted Buoys PP3 and PP8.

Anchorage.—The anchorages within Petit Cul-de-Sac Marin require local knowledge, therefore a pilot may prove beneficial.

Mouillage de Fleur d'Epee is located W of the harbor entrance range, and S of Ilot a Couchons. The area, clear of the shoals shown on the chart shows depths of 11.2 to 24m, bottom quality not stated.

There is anchorage in a depth of 23m, 0.8 mile S of Ilet a Cochons as shown on the area chart. Vessels over 1,600 grt carrying hydrocarbons or dangerous cargoes must use this anchorage.

A waiting anchorage is located E of the range line, but reports have stated that the area is not recommended due to the proximity of shoal water.

Mouillage de Petit-Bourg lies off the village of Petit-Bourg on the E side of Petit Cul-de-Sac Marin and offers anchorage in depths of 6.7m, about 0.5 mile E of the village.

Mouillage de Goyave is situated NNE of the village of Goyave. Vessels anchor in depths of 6.7m about 0.25 mile SE of the edge of **Ilet Tome** (16°09'N., 61°34'W.).

Anchorage is prohibited in an area S of **Ilet du Gosier** (16°12'N., 61°29'W.) due to submarine cables as shown on the chart.

8.54 Grande Cul-de-Sac Marin (16°20'N., 61°35'W.) is the bay on the NW side of Guadeloupe that separates Grande-Terre from Basse-Terre. The bay is encumbered by islets and reefs and should not be entered without local knowledge.

Riviere Salee flows between Basse-Terre and Grande-Terre and separates Grande Cul-de-Sac Marin to the N from Petit Cul-de-Sac Marin to the S.

Port Louis (16°25'N., 61°32'W.) (World Port Index No. 11470) is an open roadstead on the NE side of Grande Cul-de-Sac Marin. The church steeple in the town is conspicuous, as is a mill E of the town.

A light, concrete framework tower, 10m in height, stands near the shore about 137m NW of the church.

Anchorage may be obtained, in a depth of 11.9m, with the church steeple bearing 090°, and the mill seen between the steeple and the town pier.

Anse Bertrand (16°29'N., 61°31'W.) lies about 3.5 miles NNE of Port Louis. It is small sandy cove almost closed by rocks on which the sea always breaks.

A light is shown from the head of the cove. On the E side of the cove there is a black chimmey, and a church with a yellow tower, both are conspicuous.

During the summer months vessels may anchor off the cove in 10m of water, sandy bottom with some coral.

8.55 Baie de Sainte Marie (16°07'N., 61°34'W.) is entered between the month of Riviere Goyave and a point about 2 miles S. Three distinctive red cliffs stand at the head of the bay. There is a small pier at the village situated at the end of the bay.

Vessels may obtain anchorage, in a depth of 4.9m, mud, about 0.15 mile off the above small pier. There are three passes leading to the anchorage, but local knowledge is necessary. Pilotage may be obtained from the pilot station on Ilet du Gosier.

Pointe de la Capesterre (16°03'N., 61°34'W.) lies three miles S of Baie Sainte Marie. The point is formed by the delta of the two branches of the mouth of Grande Riviere de la Capesterre, which discharges through a pebble beach.

A conspicuous church with a red roof stands S of the point. A water tower stands 1 mile WSW of the point.

Between the point and Grande Pointe (Pointe a la Taste), 6 miles SSW, the depths are irregular and vessels should give this part of the coast a berth of at least 1 mile.

Anse des Trois Rivieres (15°58'N., 61°39'W.) lies about 1.5 miles W of Grande Pointe. A prominent church with a square yellow tower stands on the shore of the bay. There is a small pier for boats at the head of the bay. A light is shown near the village of Trois Rivieres.

Grande Anse (15°58'N., 61°40'W.) lies 1 mile WSW of Anse des Trois Rivieres. The bay is fringed by a gravel beach on which a prominent chimney stands.

Anchorage may be obtained in a depth of 10m, sand and rocks, about 0.2 to 0.3 mile offshore.

8.56 Pointe du Vieux-Fort (15°57'N., 61°43'W.), the SW extremity of Basse-Terre, consists of dark rock, is steep-to and clear of dangers. A large rock stands close S of the point. There

is a small pier at a village, 0.5 mile N of the point. A light is shown on the point.

Basse Terre (16°00'N., 61°44'W.) (World Port Index No. 11460), is the seat of government of the island and a port of entry. The roadstead off the town offers no shelter from S and W winds. The current in the roadstead generally sets NW or SE; it may attain a rate of two knots.

There is a mooring buoy at the port entrance W of the quay.

Aspect.—The peak of La Soufriere is among the first landmarks sighted from the offing, but it is often obscured by clouds. On closer approach, the tower of the church and the steeple of the cathedral are conspicuous.

A statue and cross stand on the tower of the church. A light is shown in the mooring area and can best be seen on the chart.

Depths—Limitations.—A concrete pier with depths of from 10.1 to 11m alongside, is situated abreast the town. The pier is 304m in length and is capable of handling vessels of up to 300m LOA with a draft of 8.8m.

Pilotage.—Pilotage is not compulsory but can be provided by Pointe-A-Pitre upon request. Pilots require 24 hour notice before arrival. The pilots may be contacted through the port authority on VHF channels 8, 12, or 16.

Anchorage.—Available in 70m depth with the Cathedral bearing 085° at 0.7 mile.

The starboard anchor should be let go first, then the port anchor, so the ship will head SE toward Huelmont, from which direction violent squalls are sometimes experienced.

A good berth for large vessels is in 32.9m with the town Cathedral bearing 105°.

There is a yacht marina, protected by breakwaters, at the mouth of Riviere Sens 1.25 miles SE of the light at Basse-Terre

Caution.—A firing danger area extends 3.75 miles seaward from close N of Pointe de Riviere des Peres to close N of Pointe des Habitants.

8.57 Anse a la Barque (16°05'N., 61°47'W.), a cove, about 6 miles NNW of Basse-Terre, offers shelter, except in W winds, to small vessels in depths of 9.1 to 10.1m. A light is shown on the N entrance point of the cove. Another light is shown on the head of the cove.

Anse de Bouillante (16°08'N., 61°47'W.) lies 2.5 miles N of Anse a la Barque. The bay can be identified by the yellow cliffs on its N side. A village stands at the head of the bay. A large conspicuous building stands N of the village. Vessels can anchor in 20.1m, about 0.2 mile offshore, a short distance S of the village.

Anse de Pigeon (16°10'N., 61°47'W.), entered N of Pointe a Lezard, offers anchorage in 20.1m about 0.2 mile offshore abreast village at the head of the bay.

Ilets a Goyaves, two rocky islets, lie 0.75 mile offshore 1.5 miles NNW of Pointe a Lezard. A television tower standing 2.5 miles ENE of Ilets a Goyaves makes a good landmark.

Pointe Noire (16°15′N., 61°49′W.) lies about 5 miles N of Ilets a Goyaves. The point is formed by black rocks.

Pointe Ferry, about 1.5 miles N of Pointe Noire, is flat and wooded

Anse Ferry, on the N side of Pointe Ferry, affords anchorage, in a depth of 14.6m, sand, about 0.2 mile offshore.

Anse Deshayes (16°18'N., 61°48'W.) lies 2 miles N of Pointe Ferry. A white church with a red belfry stands at the head of the bay.

Anchorage may be found in depths of about 23.8m, sand, with the church bearing 100°, distant 0.5 mile.

Pointe Allegre (16°22'N., 61°45'W.), the N extremity of Basse-Terre, is low and wooded. Foul ground fringes the point. A group of islets lie about 2 miles W and NW of the point.

8.58 La Desirade (16°19'N., 61°03'W.) lies about 5 miles ENE of the E extremity of Grande-Terre. The passage between the two islands is clear and deep. The N side of the island is precipitous and steep-to but rock fringed. The S side is mostly reef fringed to 0.25 mile offshore.

A light is exhibited at an elevation of 50m, from a white structure, 19m in height situated near the E extremity of La Desirade. Le Mouton is small rock, with a depth of 1.5m, and is located about 0.3 mile SE of the SE extremity of the island. The sea usually breaks over it.

Baie Mahault (16°19'N., 61°01'W.) lies on the S side of the island, about one mile WSW of Le Mouton.

Leading lights stand at the head of the bay and when in line on a bearing of 327° lead into the bay. The bay is accessible only to small craft with local knowledge.

Grande Anse (16°18'N., 61°05'W.) lies 3.75 miles WSW of Baie Mahault. Vessels anchor outside the reefs about 0.4 mile offshore with SW extremity of La Desirade bearing 270°.

When approaching the anchorage care should be taken to avoid two 10.1m shoal patches located about 1 mile and 1.75 miles, respectively, SW of Pointe du Desert.

A directional light is exhibited from a stone structure at Grande Anse. The white sector of the light leads through the reef in a channel marked by buoys.

A light is exhibited from a mast on the head of the jetty. Radio masts stand close to a church. Anse du Galet, located on the W side of La Desirade, offers shelter in all seasons.

8.59 Iles de la Petite Terre (16°10'N., 61°07'W.) consist of two low sandy islands and lie about 5 miles SSE of the E extremity of Grande-Terre. The passage between them has a least depth of 19m and is clear of dangers.

A light is shown on the E end of the island. The channel between the two islands, which can only be entered with local knowledge, is about 0.1 mile wide at its narrowest part.

A nature reserve, as shown on the chart, completely surrounds the islands.

Anchorage.—Vessels should anchor clear of the nature reserve. During S winds, vessels may obtain anchorage N of Terre de Bas in depths of about 16m. During NE winds, anchorage may be taken S of Terre de Bas in depths of about 12 to 14m. Caution should be taken to anchor clear of Baleine du Sud (0.4 miles SSW of Petite Terre Light) and the shoal patches extending over 1 mile S from the W end of Terre de Bas.

Marie Galante

8.60 Marie Galante (15°55'N., 61°16'W.) lies about 15 miles SSW of the E extremity of Grande-Terre. Grosse Pointe, the N extremity of the island, is a salient rocky point. Between

this point and Pointe Sarragot, 4 miles SE, the coast is cliffy. To the S the coast is fringed with reefs in some places up to 0.5 mile offshore.

Pointe du Gros Cap (15°54'N., 61°13'W.), the SE extremity of the island, can be identified by a conspicuous rock close offshore of the point.

Between the village of Capesterre, situated about 1.25 miles SW of Pointe du Gros Cap, and that of Grand-Bourg, situated about 5.5 miles farther W, the coast is fringed for almost its entire length by reefs and rocks extending about 1.25 miles offshore. Several houses may be seen, and for the most part are built about halfway up the bluffs. An aero radiobeacon is found seaward of the coastal road near Pointe des Basses.

8.61 Grand-Bourg (15°53'N., 61°19'W.) (World Port Index No. 11490) lies on the SW side of Marie Galante. The fort and the hospital on the NW side of the town, and the church with its belfry on its NE side, are all prominent landmarks. A conspicuous lighted TV tower stands about 1 mile N of the town. Lighted buoys mark the edge of the reefs in the approach to the pier from the W.

A T-shaped jetty, abreast the middle of the town, extends 152m SSW from the shore. The head of the jetty is 36m long, and can accommodate a maximum draft of 3m. A light is shown on the head of the jetty.

A new L-shaped jetty has been constructed parallel to, and 0.1 mile E of the pier.

Anchorage.—Anchorage for vessels over 3.3m in draft must be taken outside the reefs in 10.1 to 20.1m, on a narrow ledge which is steep-to on the outer edge. A vessel should approach steering for the belfry in line with the edge of the breakers marking the NW end of the reefs SW of the town, bearing about 045°, and anchor on this bearing in a depth of 14.6m.

8.62 Baie Saint Louis (15°57'N., 61°20'W.) lies about 4.5 miles N of Grand Bourg and is entered between Pointe Folle Anse and Pointe du Cimetiere, about 2.25 miles NNE. A light is shown from the town. Northeast winds cause a slight swell in the bay.

A T-headed jetty, about 182m long, with a depth of about 9.8m at its head, extends WNW from Pointe Folle Anse. Mooring buoys lie off the head of the pier.

Saint Louis (15°57'N., 61°19'W.) (World Port Index No. 11500) stands at the head of Baie Saint Louis. The village consists of several streets running inland, with a few houses N of them near the above light. There is a pier off the village for small craft.

Anchorage in 6.7 to 7.6m, good holding ground, can be taken W of the village, about 0.5 mile offshore. When approaching the anchorage, ships should keep at least 1 mile offshore.

Vessels over 1,600 grt carrying hydrocarbons or dangerous cargo must anchor 0.7 mile WNW of Saint Louis. A prohibited anchorage exists within 1.25 miles of two submarine cables which are laid across the S end of the bay.

An obstruction, consisting of a replacement cable, is laid along the 10m depth contour from the vicinity of 15°58.0'N, 61°19.7'W to 15°59.3'N, 61°19.3'W.

Ilet du Vieux Fort (16°00'N., 61°19'W.) lies on the coastal bank about 0.4 mile offshore and about 1.5 miles NNE of

Pointe du Cimetiere. The islet is low and covered with bushes. The passage between the islet and the shore should only be used by vessels with local knowledge.

Iles des Saintes

8.63 Iles des Saintes (15°51'N., 61°37'W.) are located with Gros Cap, the W extremity of the group, about 6.75 miles SSE of Pointe du Vieux Fort, Guadeloupe. The group consists of six islands lying close together.

Terre de Haut (15°52'N., 61°35'W.), the E island of the group, rises to its summit Mont Rossel at its SW end.

The passage between this island and Terre de Bas, is about 0.5 mile wide and clear of dangers. There is a prohibited anchorage between the two islands.

The NW side of Terre de Haut is indented by three bays.

Baie du Marigot (15°52'N., 61°35'W.) is the N bay. A stone building, Fort Napoleon, stands on the summit of a hill on the W side of the bay.. The head of the bay is foul.

Les Saints anchorage, the middle bay, is sheltered by Ilet a Cabrit and affords good anchorage.

Anchorage is prohibited for vessels over 1,600 grt carrying hydrocarbons or dangerous cargo.

Anse a Cointe is the SW bay and can be identified by a cross which stands near the S end of the bay.

8.64 Bourg des Saintes (Terre de Haut) (15°52'N., 61°35'W.) (World Port Index No. 11510), lies at the head of Les Saintes Anchorage. A large conspicuous cross, which is illuminated at night, stands S of the village church. Close N of the church is a conspicuous white house.

A light is shown near the root of the village pier. A radio mast, marked by obstruction lights, may be seen in the vicinity. A lighted buoy marks a shoal off the village. The buoy has been reported missing (2000).

There is pier, 30m long, where small vessels, drawing about 3m, can berth at the village.

Anchorage.—Anchorage is available, in depths of 14.6 to 16.5m, with the church spire in the village bearing 155°, and La Baleine, a white rock 0.6m high bearing 353°. Anchorage is prohibited for vessels over 1,600 grt carrying hydrocarbons or dangerous cargo.

Pointe de Bois Joli (15°51'N., 61°36'W.), the SW point of Terre de Haut consists of piled rock. This side of the island is very irregular and indented by a number of coves, separated by rocky points. La Redonde, a rocky islet, lies 137m S of the S extremity of Terre de Haut.

Strong winds cause heavy tide-rips and a fairly strong W current between La Redonde and the S side of Terre de Haut. Between La Redonde and Pointe de Bois Joli, a bank, with a depth of 5.8m, extends about 0.3 mile off the coast of Terre de Haut.

Grand Ilet (15°50'N., 61°36'W.) lies about 0.5 mile S of La Redonde. La Coche, a low islet, lies about 0.5 mile W of Grand Ilet. Les Augustins, a group of large steep rocks surrounded by foul ground 0.13 mile WNW of La Coche, is separate from it by a passage with a least depth of 10m in the fairway. The fairway between Les Augustins and Terre de Bas is clear of dangers.

Ilet a Cabrit (15°52'N., 61°36'W.) lies off the NW side of Terre de Haut. The three extremities of the island are dominated by conical hills. Close N of the westernmost hill is a conspicuous tower shaped rock.

La Baleine du Large, a rock with 0.4m depth and over which the sea breaks in heavy weather, lies about 0.2 mile NNW of La Baleine. A lighted buoy marks the W side of this shoal.

8.65 Terre de Bas (15°51'N., 61°38'W.) is generally hilly and the greater part of its coasts are cliffy and rocky. Gros Cap, the SW extremity of the island, consists of a high cliff. A swell is experienced off this coast, but anchorage can be taken during good weather on the narrow shore bank.

Pointe a Vache (15°52'N., 61°38'W.) is the N extremity of Terre de Bas. Le Pate is a jagged islet and lies about 0.5 mile E of Pointe Vache. The fairway between the rock and the point is about 0.1 mile wide.

Pointe du Fer-a-Cheval, the E extremity of the island, is high and wooded. Two coves lie close W of the point.

Pointe Sud, the S extremity of the island is prominent with precipitous cliffs.

Isla Aves

8.66 Isla Aves (15°40'N., 63°36'W.), a Venezuelan possession, nearly 0.3 mile long in a N to S direction and 0.5mile wide, lies 100 miles SW of Montserrat. It rises to an elevation of 3m at its N end. The sea breaks across the center of the island in anything more than a moderate swell.

The island is formed of coral, overlaid with sand which supports some vegetation. Birds abound and the island is a protected nature sanctuary. An oil rig style Texas towe,r with a radar reflector, stands on the island.

The structure on top of the tower is the size of an average house. The platform is approximately 19m high.

The tower is a manned Venezuelan Coast Guard Station, call sign Simon Bolivar Coast Guard Station.

It has been reported that, the island is a good radar target, up to 30 miles. A jetty with a depth of about 2.7m alongside its head, projects about 91m W, 0.7mile from the S end of the island.

It can be approached from W in a least depth of 2.4m.

There are patches with depths of 1.4m and 1.5m over them 0.7mile SW and 137m NW, respectively, of the jetty head.

Coral reefs, drying and below-water with depths of less than 30.5m, extend 1.5 miles S of the island and to a lesser distance in other directions. The limit of the coral is normally visible in daylight.

A racon transmits from Isla Aves.

In moderate weather, landing can be made in the center of the W side of the island, where there is a narrow sandy beach extending to the LW line.

Vessels without local knowledge should not approach the island within 1.8 miles, but if necessary to anchor an approach from SSW is recommended.

Regular depths of about 15.2m should be found between 1.5 miles and 0.4 mile from the shore. A lookout for coral heads is essential. It should be possible to select a suitable patch, free from coral visually.

The recommended anchorage is with the light bearing 077°, distant 0.3 mile, in a depth of 5.3m. There is a 2.8m patch 0.1mile ENE of this position. In 1994, the mast was reported not to exist.

Caution.—It has been reported that much of the island was washed away during a hurricane years ago (1997), leaving two sand cays bordered by coral reefs, with a pool between.

All the above information should, therefore, be used with caution.

A coral bank, 2 miles in diameter, lies 10 miles S of Isla Aves. The last known depth over the bank is 21.9m, but it is possible that lesser depths exist and deep draft vessels are advised to keep well clear of the area. Another patch, with a depth of 7.3m has been reported about 3.7 miles SE of Isla Aves.

Dominica

8.67 Dominica (15°25'N., 61°20'W.) lies with Cape Capuchin on its N coast about 13 miles SSE of the E extremity of Grand Islet, Iles des Saints. Dominica is an island with lofty rugged mountains which extend its full length from N to S and are usually obscured by clouds.

The island has been reported to give good radar returns up to 25 miles from its E coast. There are several good, but open roadsteads on the W side of the island, the principal of which is Roseau, though the best is Prince Rupert Bay.

Winds—Weather.—Vessels in the vicinity of the island should watch out for heavy squalls which come off the high land and through the deep valleys. These squalls blow with great force during the strong trades.

Off Soufriere Bay and the valley of the River Layou are the most dangerous areas. Calms are frequent during the light trades.

Cape Capuchin lies at the W end of a 2 mile stretch of cliffs forming the N coast. The cape has been reported to give good radar returns up to 15 miles. From this cape the W coast trends 2 miles S to Douglas Point, the N entrance point to Douglas Bay.

There is a conspicuous blue house on the hillside at the N end of Douglas Bay. Prince Rupert Bluff Point lies about 1.5 miles SW of Douglas Point. The bluff is on the W end of a peninsula which forms the N side of Prince Rupert Bay.

Tides—Currents.—West of the island the tidal currents are weak and are masked by the currents and wind drifts. For several days the set may be N or S, parallel to the coast, the rate in some places being two knots.

On the E side the tidal currents are regular, but the effects of the N ocean currents causes the N tidal currents to be stronger and of a longer duration than the S tidal currents.

Off Pointe Peine the N current attains a rate of 1.5 knots. Off the NE side of the island it attains a rate of two knots, but the SE tidal current is barely perceptible.

8.68 Prince Rupert Bay (15°34'N., 61°29'W.) is entered between Prince Rupert Bluff Point and Point Ronde (Rollo Head), about 3 miles to S.

At the head of the bay stands the small town of **Portsmouth** (15°34'N., 61°28'W.) (World Port Index No. 11530). The gray spire and red roof of the Catholic Church in the town is conspicuous.

The white Methodist Chapel, E of the Catholic Church, is prominent from offshore. There are two jetties and a prominent warehouse 1 mile S of Portmouth.

A T-shaped wooden pier, for the use of passenger vessels, is located in the N part of the bay on the S side of Prince Rupert Bluff Point; the berth is 76m long. It was reported (1991) that the depths at the berth were 3.3m; however, greater depths have been reported since.

An L-shaped pier, extending about 70m from shore S of Glanvilla, serves barges and local traffic. Depths of 3.6m are reported near the pier head.

Prince Rupert Bay affords the best anchorage in Dominica, being generally clear of dangers and protected from all but W winds.

Anchorage may be taken about 0.3 mile off the coast, between Portsmouth and the Picard Estate, about 1 mile S, in depths of from 9.1 to 18.3m, as shown on the chart.

8.69 Grande Savane (15°27'N., 61°28'W.), about 6 miles SSE of Point Ronde, is the largest area of sloping land on the W side of Dominica. It has very little vegetation and is usually very parched.

The coast for about 4 miles N of Grand Savane is steeper and more rugged than that immediately S of it. A light is exhibited close SE of Point Ronde at Barbers Block near the summit of Morne Espagnol.

A light is shown S of the town of Salisbury about 0.5 mile SE of Grande Savane.

River Layou (15°24'N., 61°26'W.), which discharges close S of the town of Saint Joseph about 3.5 miles SSE of Grande Savane, is the largest in the island. From the W its entrance is easily identified by the lowness of the land. A radio mast, marked by lights, stands 0.5 mile NE of the mouth of River Layou.

Anchorage can be taken in 14.6 to 18.3m, about 0.2 mile N or S of the river mouth. The N anchorage is the one most frequently used. The bay is exposed to N and W winds.

Roseau (15'18'N., 61'24'W.)

World Port Index No. 11520

8.70 The port of Roseau comprises Woodbridge Bay and Roseau Roads.

Woodbridge Bay lies N of Roseau. It is backed by tablelandsthat are intersected by ravines. The tablelands are much lower than Morne Daniel and Morne Bruce, N and S of them, respectively.

A radio mast stands 0.5 mile SSE of Morne Daniel.

Depths—Limitations.—Woodbridge Bay Ocean Berth is located near the center of Woodbridge Bay and is the longest

and deepest berth, with a length of 240m and a depth of 11m alongside.

Pier Facilities—Woodbridge Bay		
Wharf	Length	Depth alongside
Main	266m	9.7m
Schooner	60m	2.7m
New Inner	90m	7.9m

Vessels up to 244m long, with a maximum draft of 8.8m, can be accommodated at Main Wharf. A cruise ship terminal extends SW from shore between two lighted dolphins close NW of Fort Young. The depth alongside is reported to be 9.6m.

Aspect.—Morne Bruce (15°18'N., 61°23'W.) is a tableland, 144.8m high, and rises close E of the town. On its summit are several old military buildings.

Fort Young, close to the shore at the S end of the town, is slightly higher than the other buildings in its vicinity, and at its W corner there is a prominent flagstaff. The Catholic Church spire in the town is prominent. The Wesleyan Church spire which is white-washed, is also conspicuous. A good landmark is the red bridge which crosses the river at its mouth.

Pilotage.—Pilotage is compulsory for vessels over 100 grt. Pilotage is available for anchorage on request. Vessels should send a request for pilot and ETA 48 hours in advance. Tankers should include their drafts and cargo details in the message. VHF contact with the pilots should be established 2 hours prior to arrival.

The pilot boards about 1 mile W of the mouth of the Roseau River and may be contacted by VHF channels 12, 14, or 16 and radiotelephone.

Pilotage is also available here for **Woodbridge Bay Terminal** (15°18.5'N., 61°23.9'W.); Rockaway Anchorage, about 1 mile N of Woodbridge Bay; and **Belfast Anchorage** (15°21.7'N., 61°24.8'W.).

Anchorage.—Vessels wishing to anchor while awaiting a berth, or to obtain Customs clearance, should do so either between the S limit of the restricted area in Woodbridge Bay and the mouth of Roseau River, or between the Import jetty and a line drawn 200° from Fort Young Light.

There is an anchorage in 42m, good holding ground, 0.75 mile NW of Fort Young.

A restricted area is established and may best be seen on the area chart. Vessels should not enter this area without permission of the Port Manager.

A vessel weighing anchor at the SW corner of the area fouled a large mooring buoy and cable which were cut free and dumped in deep water.

A tanker terminal is reported to be available, about 2.5 miles N of Roseau. A hose is floated to vessels at anchor.

The mooring buoy charted in Woodbridge Bay is used by water tankers.

Caution.—Anchorage off the town is treacherous and cannot be recommended due to the narrowness and steepness of the bank, which, combined with an E wind, has resulted in vessels drifting to seaward during the night.

8.71 Point Michel (15°15'N., 61°23'W.) lies about 2.5 miles SSE of Roseau. A conspicuous church stands on the point, along with a tower.

Vessels may anchor 0.15 mile off the point, but care should be taken as the depths increase so suddenly that within 100m they may change from 18.3 to 54.9m.

Soufriere Bay (15°13'N., 61°23'W.) lies about 2 miles S of Point Michel. The bay is not recommended as an anchorage because of the steep-to shore. Small craft have to secure to the shore after anchoring.

Scotts Head (Cap Cachacrou) forms the S entrance point of Soufriere Bay, and is also the SW extremity of Dominica.

A lighted radio mast stands on the head. Shoal water, including several rocks with depths of 1.8m or less over them, extends 0.25 mile W from Scotts Head.

The character of the NE part of Dominica presents distinct contrast to that of any other portion. On this side, the land descends less abruptly from the mountains, and the depths offshore indicate continuation of this gradual slope, there being depths of less than 182.9m about 3.5 miles offshore.

Point Jaquet (15°38'N., 61°26'W.) is the N extremity of Dominica. Pointe La Sole lies about 7 miles ESE of Point Jaquet, and the reef extending NW, protect an anchorage for small vessels.

The depth at the anchorage is 7.3m, but the maneuvering space is limited so that vessels are steadied by the use of hawser to shore.

Crompton Point is the NE extremity of Dominica and lies 1 mile ESE of Pointe La Sole. A aero radiobeacon is situated about 2 miles S of Crompton Point at Melville Hall airfield.

Captain Scott's Rock, on which the sea-breaks heavily, lies about 3 miles SSE of Crompton Point.

Pagua Bay (15°31'N., 61°17'W.) lies about 1 mile S of Captain Scott's Rock. The bay affords landing partially protected by a reef, which extends about 0.2 mile SE from its NW side. A radio tower, marked by obstruction lights, stands near the coast 1.75 miles S of Pagua Pointe.

Saint David Bay (15°26'N., 61°16'W.) lies about 5 miles SSE of Pagua Bay. The bay offers anchorage to small craft with local knowledge in the lee of the S entrance point. During N winds a heavy sea sets in, and the anchorage is only safe with winds from S of ENE.

8.72 Point a Peine (15°24'N., 61°15'W.) lies about 2.25 miles SSE of the S entrance point of Saint David Bay.

The point is the SE extremity of a promontory. On the N side of this promontory lies Grand Marigot Bay, and on its S side is Petit Soufriere Bay. La Plaine, situated on a rounded point about 3 miles S of Rosalie Point, the S entrance point of Petit Soufriere Bay, is the most level part of this side of the island. A church stands on the point.

Grand Bay (15°14'N., 61°19'W.) lies about 6.5 miles SSW of La Plaine and is entered between Carib Point and Tanama Point

Dominica-Martinique Channel (15°07'N., 61°12'W.), separating Dominica and Martinique, is about 22 miles wide, and is deep and free of dangers.

A bank, with a reported least depth of 73.2m, lies about 20 miles E of the S end of Dominica. The currents in the passage set W at an average rate of 1 knot.